

# PS-LX40/LX40P/LX43P/LX44P

## SERVICE MANUAL

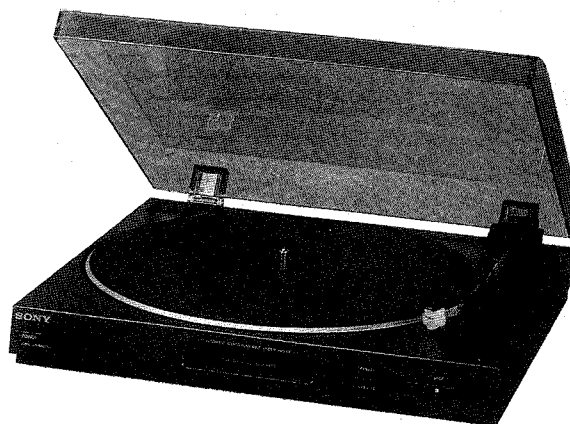


Photo : PS-LX40

*US Model*  
PS-LX43P

*AEP Model*  
PS-LX40P/LX43P

*UK Model*  
PS-LX40P/LX43P/LX44P

*E Model*  
PS-LX40/LX40P/LX43P

### SPECIFICATIONS

#### Turntable

Platter	30 cm
Motor	DC servo motor
Drive system	Belt drive
Speed	33 $\frac{1}{3}$ rpm/45 rpm switchable
Wow and flutter	0.2% (WRMS)
Signal-to-noise ratio	50 dB (DIN-B)
Automatic system	Return, reject

#### Tonearm

Type	Statically balanced
Pivot-to stylus length	203 mm
Overall arm length	235 mm

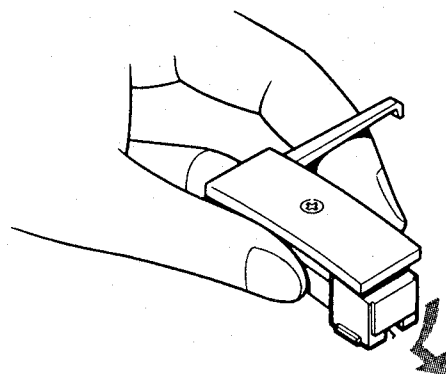
#### Cartridge

Type	Moving magnet type
Frequency response	20 Hz - 20 kHz
Stylus	ND-155G

#### General

Dimensions	Approx. 355 × 95 × 345 mm (14 × 3 $\frac{3}{4}$ × 13 $\frac{5}{8}$ inches)
Weight	PS-LX40 : Approx. 2.5 kg PS-LX40P/LX43P/LX44P : Approx. 2.1 kg (4 lb 11 oz)
Power requirements	PS-LX40 : 110 - 120 V, 220 - 240 V AC adjustable, 50/60 Hz PS-LX40P/LX43P/LX44P : 12V DC. Supplied from STEREO DECK RECEIVER (HST).
Power consumption	4 W
Accessory supplied	45-rpm adaptor (1)
Optional accessories	Replacement stylus ND-155G

### REPLACING THE STYLUS



Replace the stylus after about 400 hours of use because using a worn stylus will damage records.  
An ND-155G replacement stylus is available at your Sony dealer.  
Be sure to turn the amplifier off before proceeding with replacement.

- 1 While holding the cartridge, detach the stylus assembly as illustrated.
- 2 Insert the new stylus into the cartridge.

Design and specifications subject to change without notice.



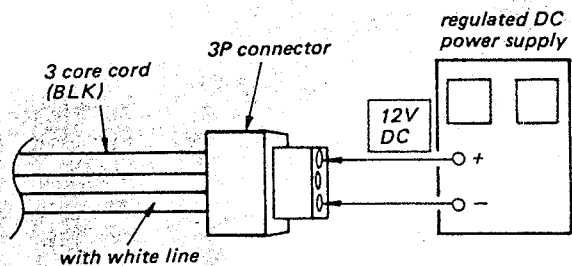
STEREO TURNTABLE SYSTEM  
**SONY®**

## PS-LX40/LX40P/LX43P/LX44P

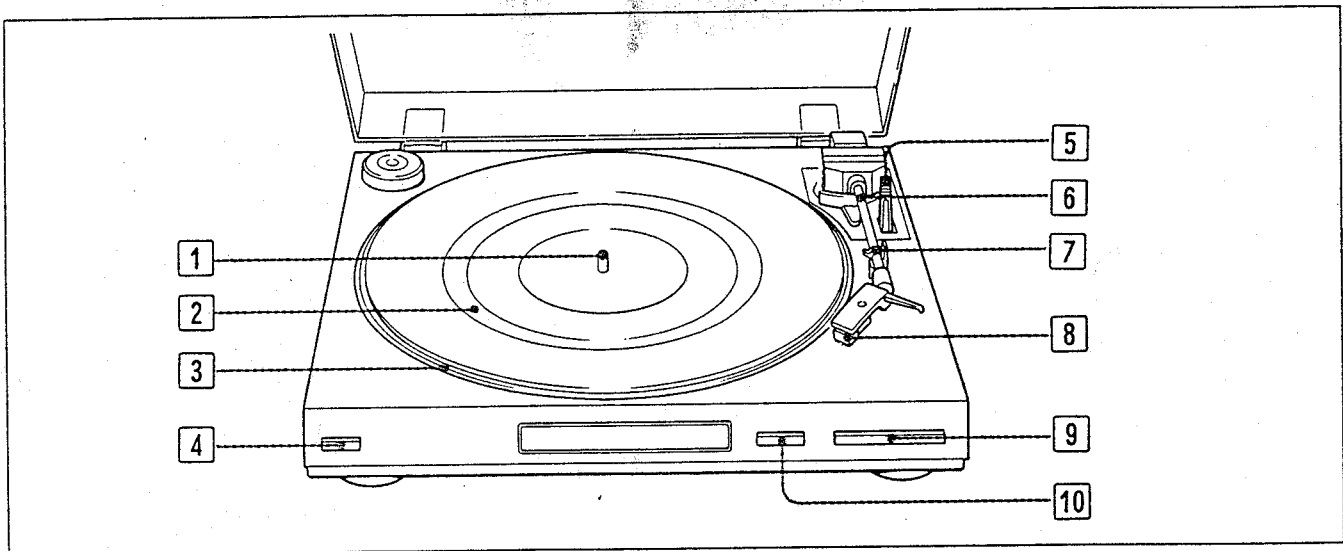
### REPAIRING PRECAUTION (PS-LX40P/LX43P/LX44P only)

#### [To supply B+ voltage]

The power of this unit is fed from HST-D201, D301, D301CD or D501CD. Because of this, connect the regulated power supply as illustrated right when this unit alone operates.

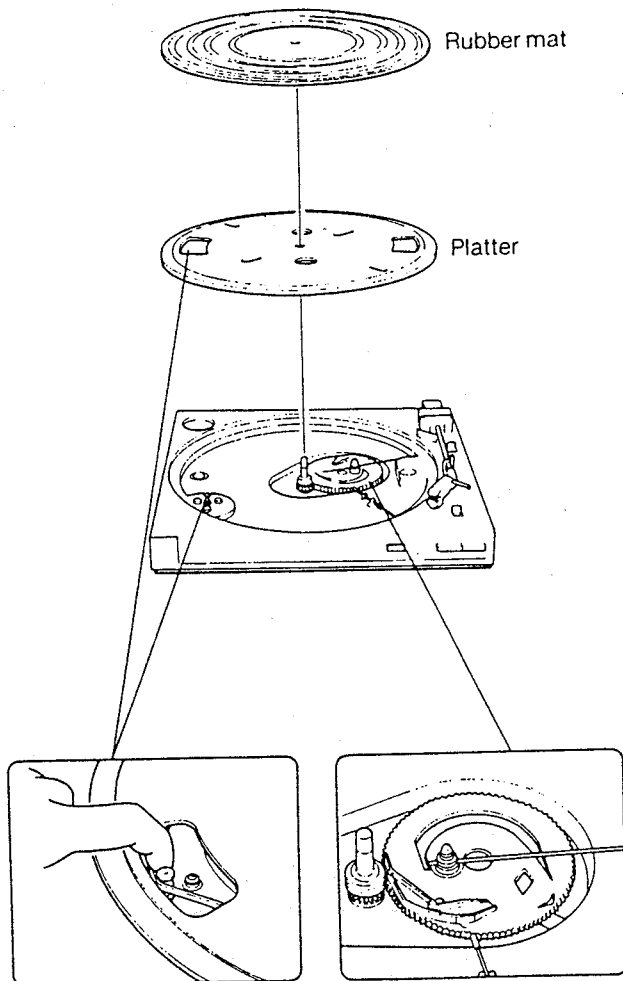


### LOCATION AND FUNCTION OF CONTROLS



- 1 Center spindle
- 2 Rubber mat
- 3 Turntable platter
- 4 POWER switch (PS-LX40 only)
- 5 Cueing lever (▼/▼)
- 6 Tonearm
- 7 Arm rest
- 8 Cartridge
- 9 REJECT button
- 10 SPEED select button  
Allows selection of 45 rpm or 33 rpm turntable speed.

## TURNTABLE ASSEMBLY



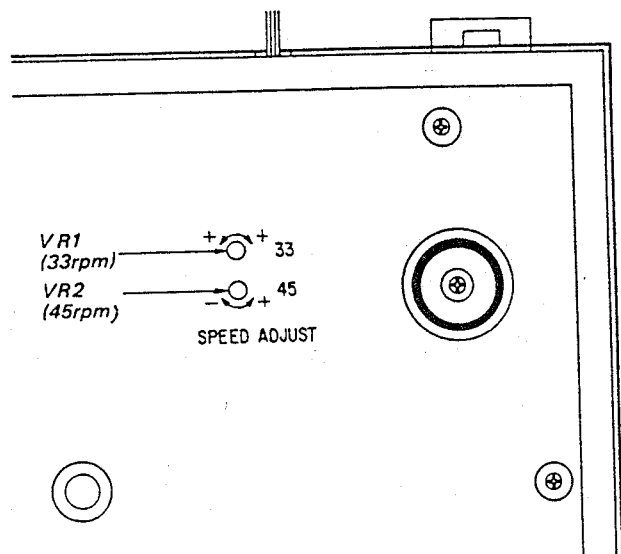
Hook the belt on the motor pulley.

If the belt is removed from the platter, replace it with the glossy side outward.

### Speed Adjustment

**Note:** Be sure to perform 45rpm adjustment before 33 rpm.

1. Place a stroboscope board on the turntable sheet.
2. Set the SPEED switch to 45.  
Press the START button.  
Adjust VR2 so that the stripped pattern of stroboscope board is stationary.
3. Set the SPEED switch to 33.  
Adjust VR1 in the same way.

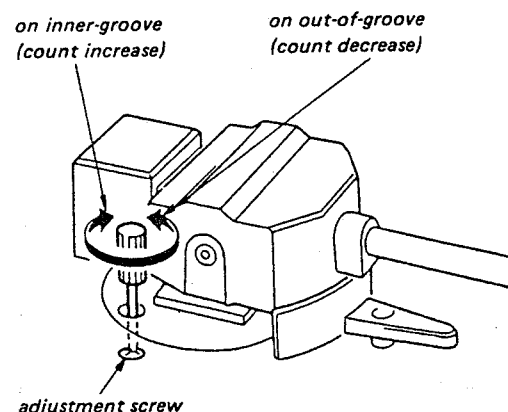


### Stylus Drop-point Adjustment

1. Place a test record (YFSC-16) on the turntable sheet.
2. Set the SPEED switch to 33.
3. Press the START button.
4. By using a screwdriver, turn the adjustment screw so that the stylus tip drops on the record at the 7-17 counts position.
5. Move the arm to return detecting groove and confirm that the auto-return operation is started normally.

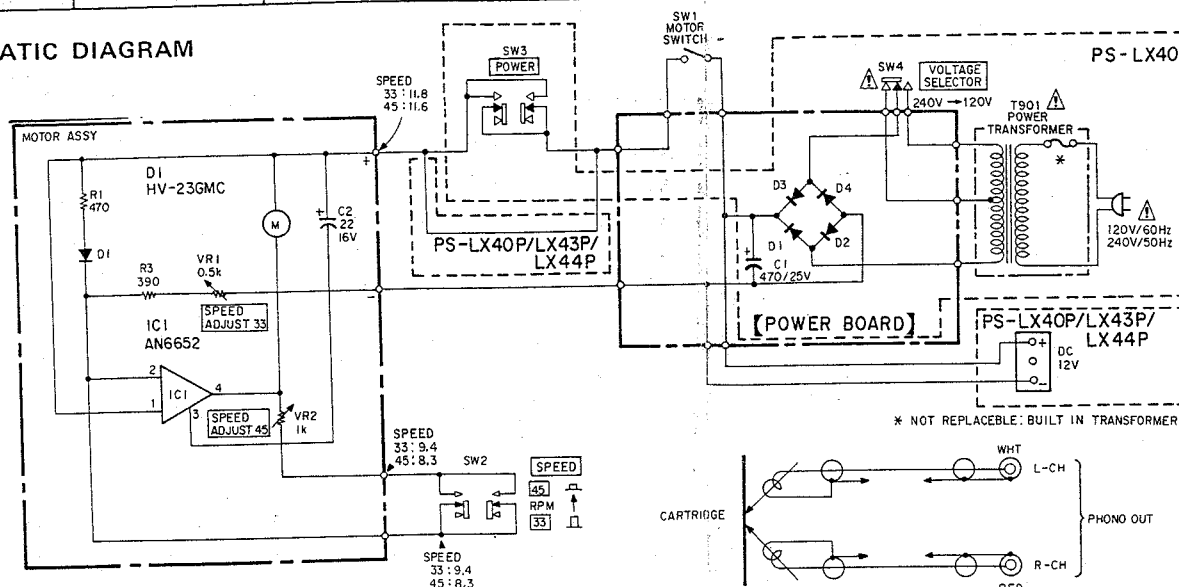
**Note:** The proper adjustment for a 30cm record is also correct for a 17cm record.

When turning adjustment screw, put the arm on the arm rest.

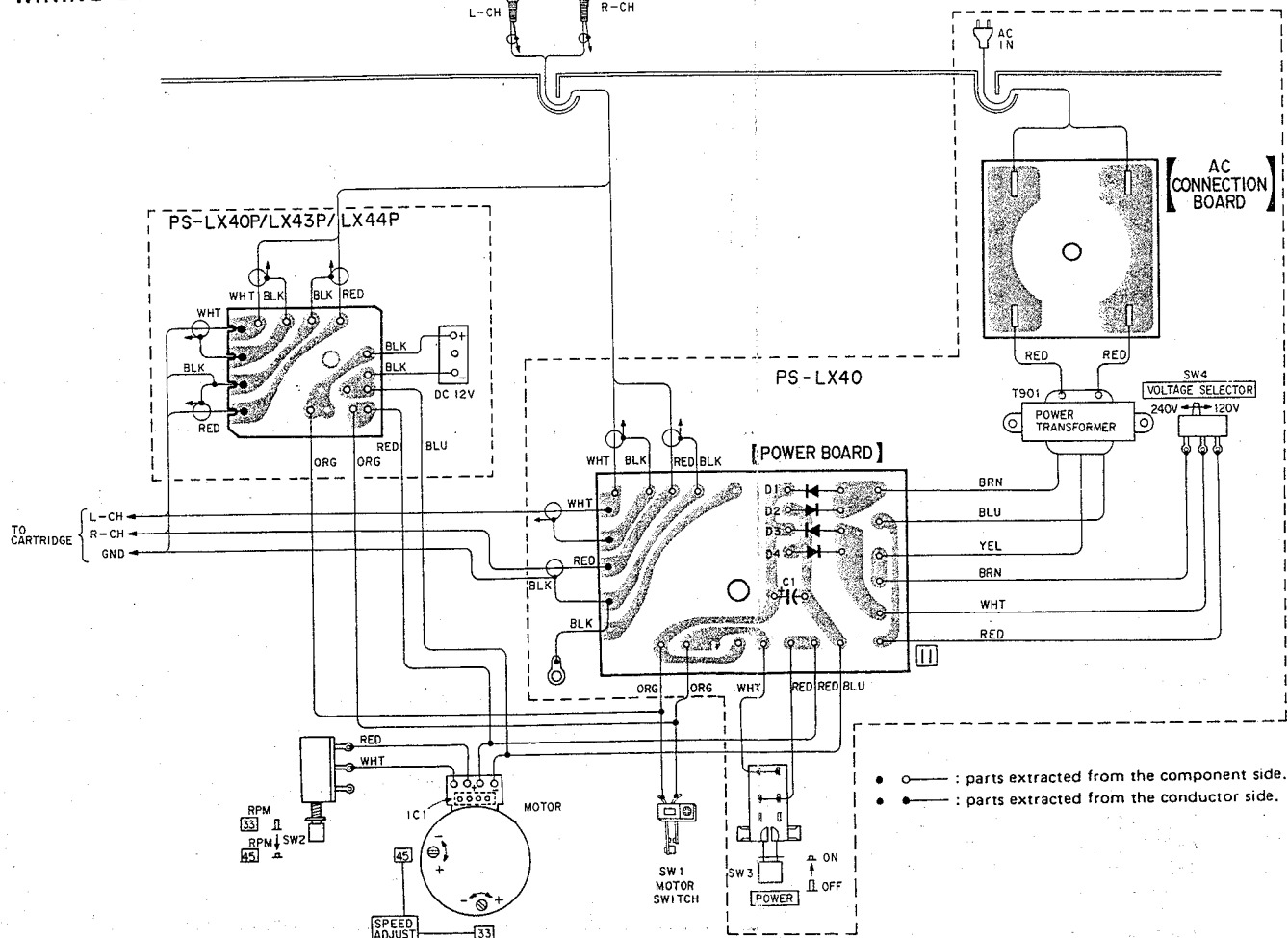


# S-LX40/LX40P/LX43P/LX44P

## CHEMATIC DIAGRAM



## WIRING DIAGRAM



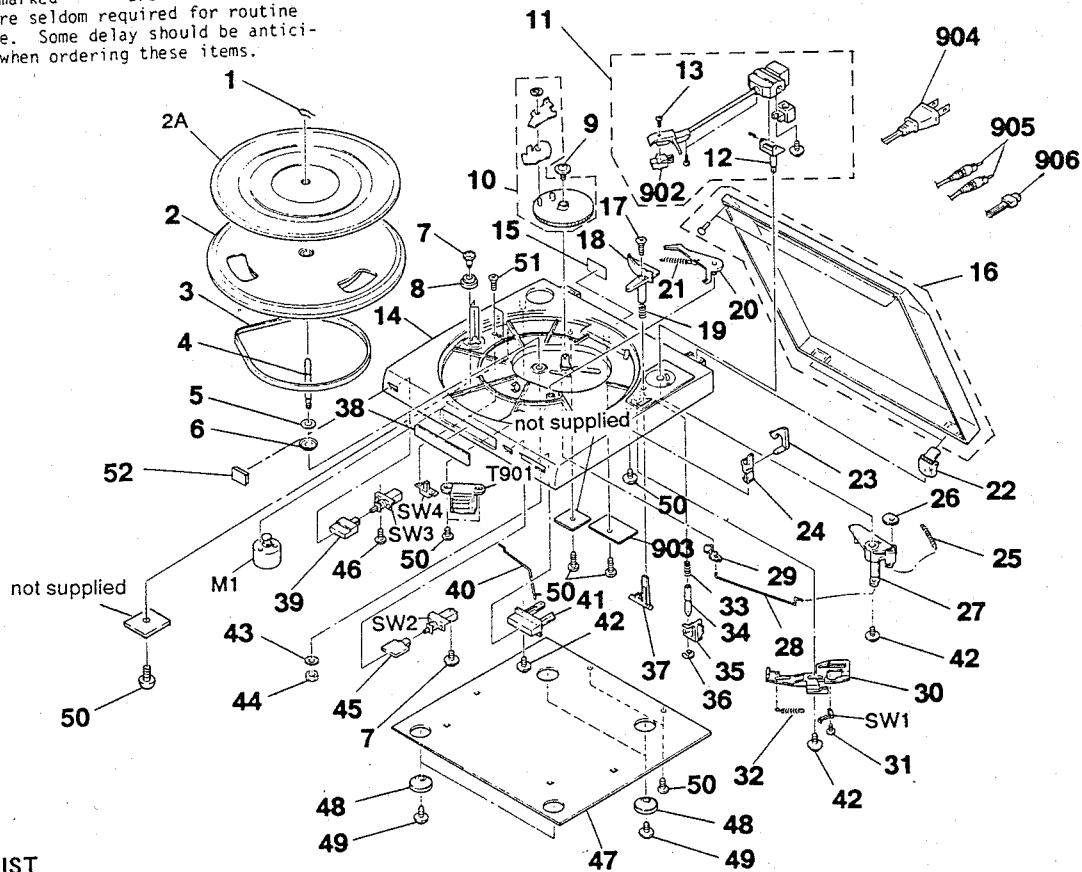
## EXPLODED VIEW

## NOTE:

The mechanical parts with no reference number in the exploded views are not supplied.

Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.

The construction parts of an assembled part are indicated with a collation number in the remark column.



## PARTS LIST

No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
1	4-895-490-01	CLIP, SPINDLE		23	4-895-418-01	P. U. TUBE HOOK	
2	A-4604-243-A	TURNTABLE ASSY (Platter)		24	4-895-417-01	P. U. REST	
2A	4-896-518-01	MAT, TURNTABLE		25	4-895-460-01	ADJUST SPRING	
3	4-880-655-01	BELT		26	4-895-818-01	ADJUST CAM	
4	4-896-361-01	SPINDLE		27	*4-896-372-01	LINK, RETURN	
5	4-895-024-01	POLY WASHER		28	*4-896-371-01	ROD, TRIP	
6	*4-895-404-01	SPINDLE WASHER		29	4-896-304-01	LEVER, TRIP	
7	7-685-646-79	SCREW, TA +BV3x8		30	*4-896-373-01	ARM, SLIDE	
8	4-895-414-01	GROMMET (A)		31	7-685-104-19	SCREW, +P2x6	
9	4-896-294-01	SCREW (7-BID 3006 ZN3A 10D)		32	4-896-374-01	SPRING (SLIDE ARM)	
10	4-895-495-01	GEAR, CAM, CLUTCH		33	4-896-251-01	SPRING (B)	
11	A-4604-242-A	ARM ASSY	902	34	4-896-252-01	SHAFT, ARM LIFT	
12	4-895-464-01	P. U. HINGE BRACKET		35	4-896-253-01	FORK, LIFT	
13	7-627-553-98	SCREW, PRECISION +P2x8		36	4-896-254-01	RING (DIA. 3), E	
14	4-896-362-01	(LX40P:GRAY)... CABINET		37	4-896-212-01	LEVER, CUE	
	4-896-387-01	(LX40)... CABINET		38	4-896-366-01	PANEL, FRONT	
	4-896-504-01	(LX40P:WHITE)... CABINET		39	4-896-388-01	(LX40)... BUTTON, POWER	
	4-896-544-01	(LX43P:GRAY)... CABINET		40	4-896-367-01	LOT (REJECT)	
	4-896-545-01	(LX43P:WHITE)... CABINET		41	4-896-368-01	(GRAY)... BUTTON, STOP	
	4-896-546-01	(LX44P)... CABINET			4-896-398-01	(WHITE)... BUTTON, STOP	
15	*4-896-347-01	(LX40)... LABEL, MODEL NUMBER		42	4-896-369-01	SCREW (7-CUP 3008 WF12 ZN3A)	
	*4-896-348-01	(LX40P)... LABEL, MODEL NUMBER		43	7-623-424-07	LW 5	
	*4-896-348-11	(LX40P:West Germany) ... LABEL, MODEL NUMBER		44	7-684-024-04	N 4	
16	A-4620-041-A	COVER ASSY, DUST		45	4-896-370-01	(GRAY)... BUTTON, SPEED	
17	7-621-561-49	SCREW, +K2.6x12			4-896-399-01	(WHITE)... BUTTON, SPEED	
18	4-896-258-01	PLATFORM, LIFT		47	4-896-376-01	PLATE, BOTTOM	
19	4-896-267-01	SPRING (A)		48	4-895-435-01	FOOT	
20	4-896-364-01	LEVER, REJECT		49	4-896-377-01	SCREW (7-CUP 3010 WF12 ZN3A)	
21	4-896-365-01	SPRING (C)		50	4-896-375-01	SCREW (7-CUP 3012 WF08 ZN3K)	
22	4-895-410-01	HINGE ASSY		51	7-621-775-20	SCREW, +B2.6x5	
				52	4-925-161-21	(LX44P)... EMBLEM (4-A), SON	

# S-LX40/LX40P/LX43P/LX44P

## ELECTRICAL PARTS

### NOTE:

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "★" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

The components identified by mark  $\Delta$  or dotted line with mark  $\Delta$  are critical for safety. Replace only with part number specified.

Ref.No.	Part No.	Description
902	1-549-135-11	CARTRIDGE
903	- - -	(LX40)...PC BOARD, POWER
904	$\Delta$ 1-555-795-00	(LX40:AEP, West Germany, Saudi Arabia) .....CORD, POWER, EULO PLUG
	$\Delta$ 1-551-188-XX	(LX40:E)...CORD, POWER
905	1-555-116-11	CORD, CONNECTION
906	1-557-109-21	(LX40P/LX43P/LX44P)...CORD, CONNECTION (3 CORE)
C1	1-123-336-00	ELECT 470 $\mu$ F 25V
D1	8-719-200-02	(LX40)...DIODE 10E2
D2	8-719-200-02	(LX40)...DIODE 10E2
D3	8-719-200-02	(LX40)...DIODE 10E2
D4	8-719-200-02	(LX40)...DIODE 10E2
M1	A-4604-244-A	MOTOR ASSY
SW1	1-570-666-11	SWITCH, LEAF
SW2	1-571-089-11	SWITCH, PUSH (1 KEY) (SPEED)
SW3	1-571-560-11	(LX40)...SWITCH, PUSH (1 KEY) (POWER)
SW4	$\Delta$ 1-571-088-11	(LX40)...SWITCH, SLIDE (VOLTAGE SELECTOR)
T901	$\Delta$ 1-449-291-11	(LX40)...TRANSFORMER, POWER

### ACCESSORY & PACKING MATERIAL

3-701-806-00	ADAPTOR, 45
3-750-345-11	(LX40)...MANUAL, INSTRUCTION (English, French, Spanish)
4-896-513-01	(LX40)...INDIVIDUAL CARTON
4-896-384-01	(EXCEPT LX40).....CUSHION(R)
4-896-385-01	(EXCEPT LX40).....CUSHION(L)

Sony Corporation  
Audio Group

9-955-811-11

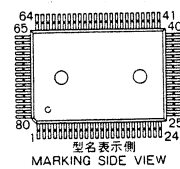
English  
90D09100-1  
Printed in Japan  
© 1990.4  
Published by Customer Relations and Service Group

## SECTION 3 DIAGRAMS

### 3-1. SEMICONDUCTOR LEAD LAYOUTS

DTA114ES  
DTA124ES  
DTC114ES  
DTC144ES  
DTC124ES  
2SA1317  
2SA1175  
2SC2724  
2SC2603  
2SC3622A

μPD75308GF



SEL2210S-C  
SEL4B14A-D  
SEL2410E-D  
SEL2810A-C



2SK246GR3



2SC3112  
2SC1815  
2SC945

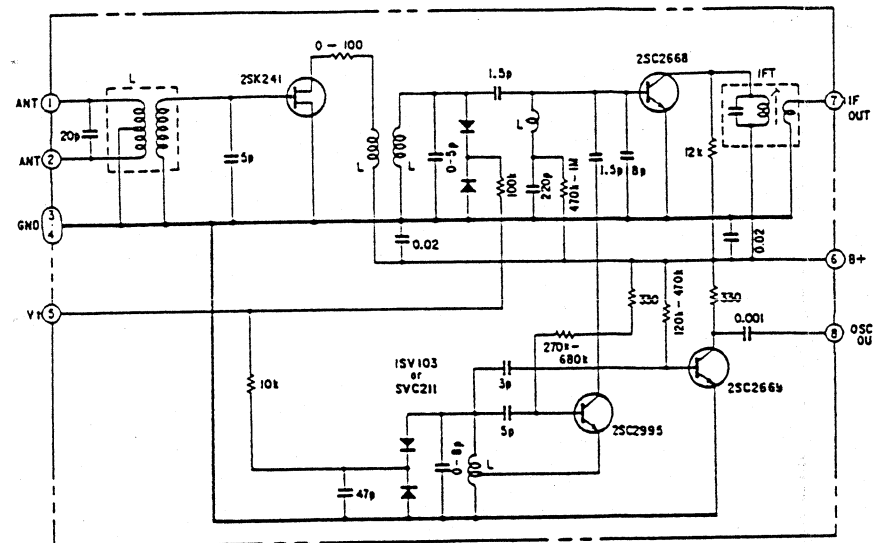


2SD1761  
2SB1187

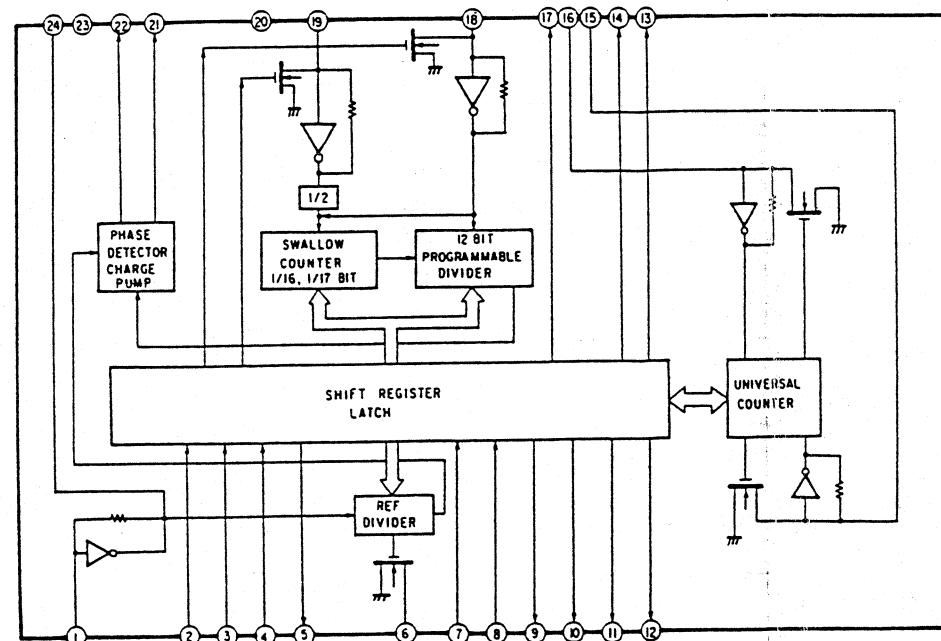


### 3-2. IC BLOCK DIAGRAMS

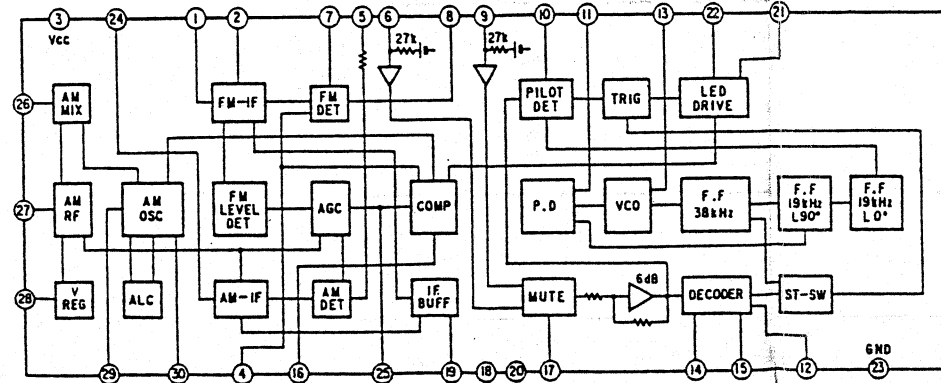
#### • FM FRONT-END FE1



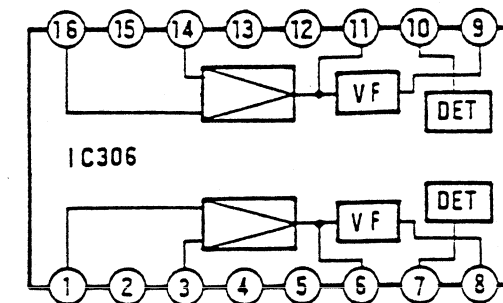
#### • IC101 LC7218



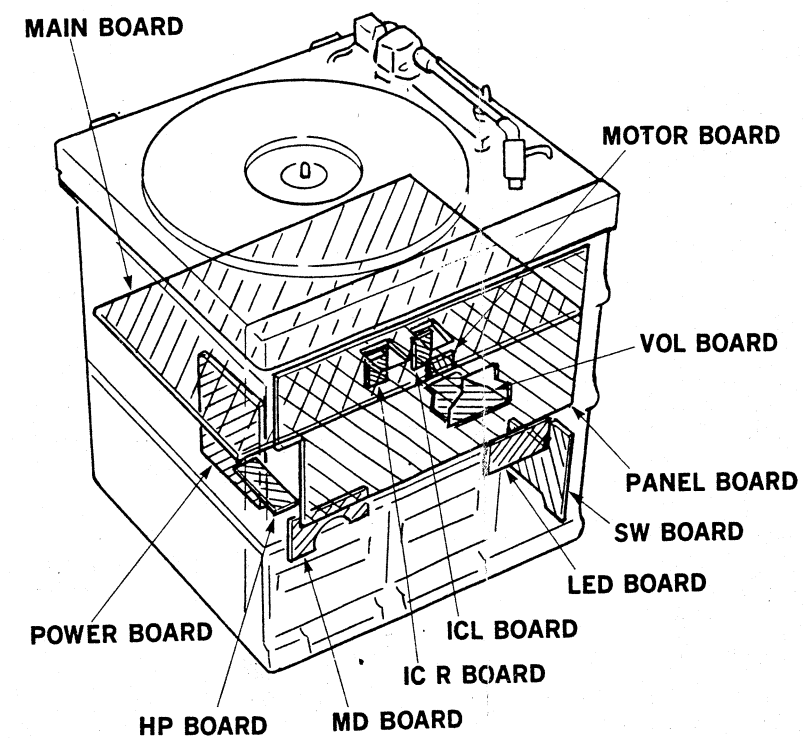
#### • IC51 LA1851N



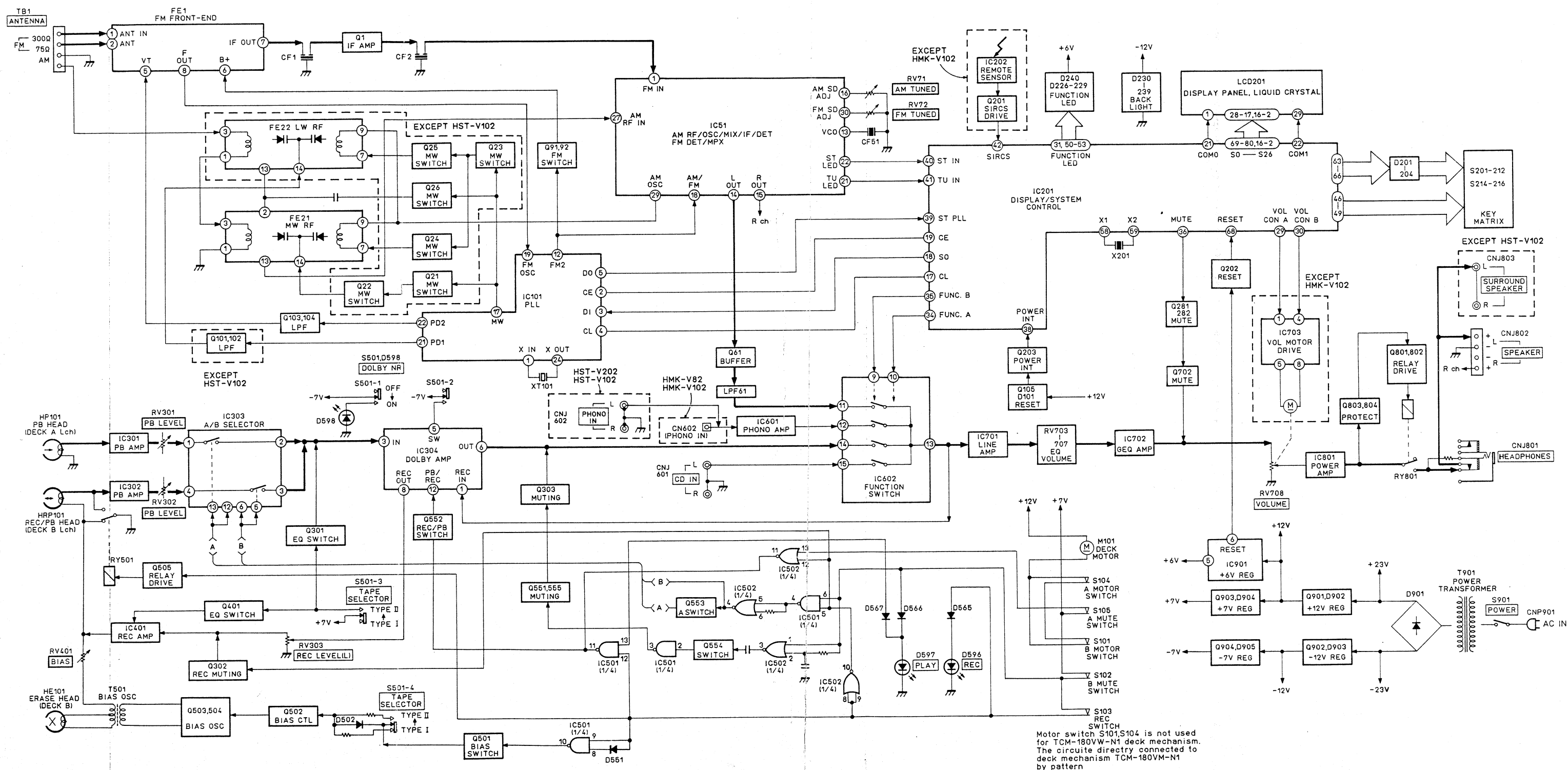
#### • IC304 CXA1100



### CIRCUIT BOARDS LOCATION



### 3-3. BLOCK DIAGRAM



HMK-V82/V102  
HST-V102/V202

HMK-V82/V102  
HST-V102/V202

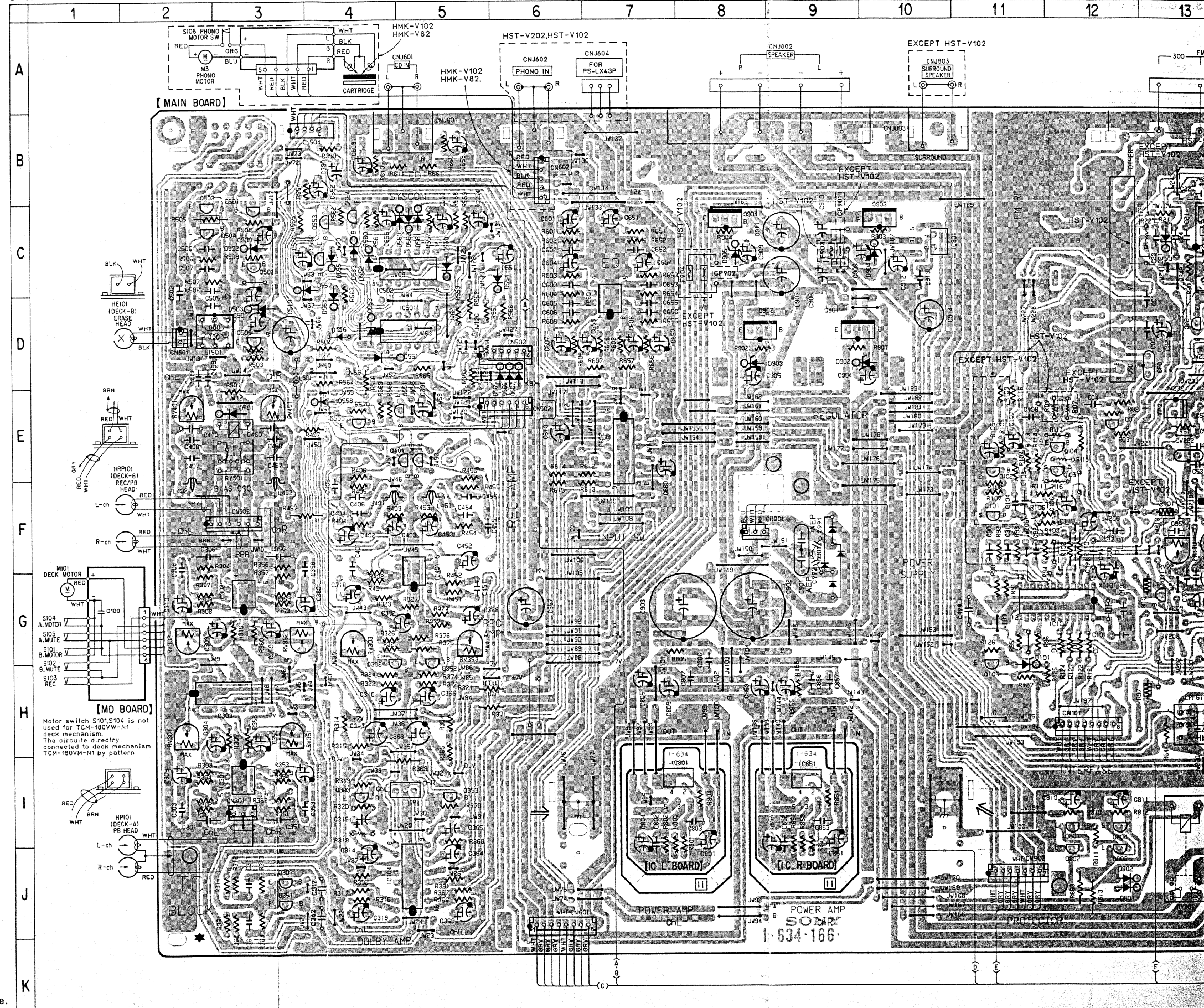
• Semiconductor Location

Ref. No.	Location	Ref. No.	Location
D21	C-13	IC304	J-5
D101	H-11	IC401	G-5
D201	B-23	IC501	D-5
D202	B-23	IC502	C-4
D203	B-23	IC601	D-7
D204	B-23	IC602	E-7
D206	A-24	IC701	E-24
D208	A-23	IC702	D-24
D211	A-23	IC703	C-22
D221	C-29	IC801	I-8
D222	D-28	IC851	I-9
D223	D-29	IC901	C-10
D226	E-18		
D227	E-19	Q01	E-12
D228	E-19	Q21	D-13
D229	E-17	Q22	D-13
D230	A-24	Q23	D-14
D231	A-25	Q24	D-14
D232	A-25	Q25	D-14
D233	A-25	Q26	C-14
D234	A-26	Q61	G-14
D235	A-24	Q66	H-14
D236	B-25	Q91	G-13
D237	B-25	Q92	G-13
D238	B-25	Q101	F-11
D239	B-26	Q102	E-11
D240	C-21	Q103	E-12
D501	E-3	Q104	E-12
D502	C-3	Q105	H-11
D503	D-3	Q201	B-28
D551	D-4	Q202	B-29
D552	C-4	Q203	D-27
D553	D-4	Q281	D-27
D554	C-6	Q282	D-28
D555	C-4	Q301	J-3
D556	D-4	Q302	H-4
D557	C-4	Q303	I-4
D558	E-4	Q351	J-3
D559	C-5	Q352	H-5
D560	C-5	Q353	I-5
D561	C-5	Q401	E-5
D562	C-5	Q451	E-5
D563	C-4	Q501	C-3
D564	D-4	Q502	C-3
D565	D-6	Q503	B-2
D566	D-6	Q504	C-2
D567	D-6	Q505	D-3
D596	I-20	Q551	E-5
D597	I-20	Q552	C-4
D598	I-19	Q553	C-4
D801	J-12	Q554	C-4
D802	J-12	Q555	E-4
D901	F-9	Q701	E-25
D902	D-10	Q702	C-19
D903	D-8	Q751	E-25
D904	C-10	Q752	C-21
D905	C-8	Q801	I-12
		Q802	J-12
IC051	F-14	Q803	J-12
IC101	G-12	Q804	I-12
IC201	C-27	Q901	D-8
IC202	A-28	Q902	D-8
IC301	I-3	Q903	C-10
IC302	G-3	Q904	C-8
IC303	H-3		

Note:

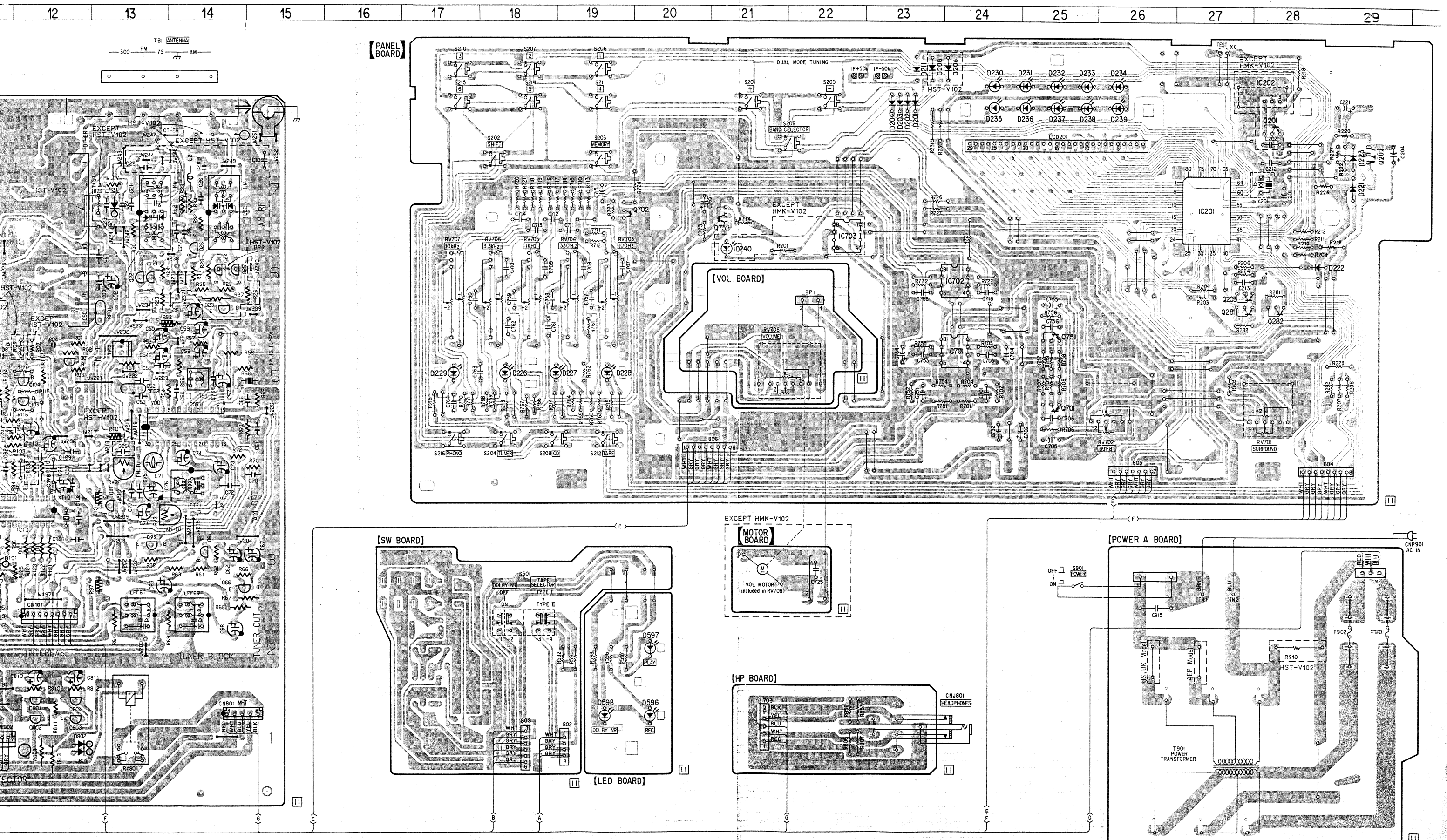
• — : parts extracted from the component side.

3-4. PRINTED WIRING BOARDS

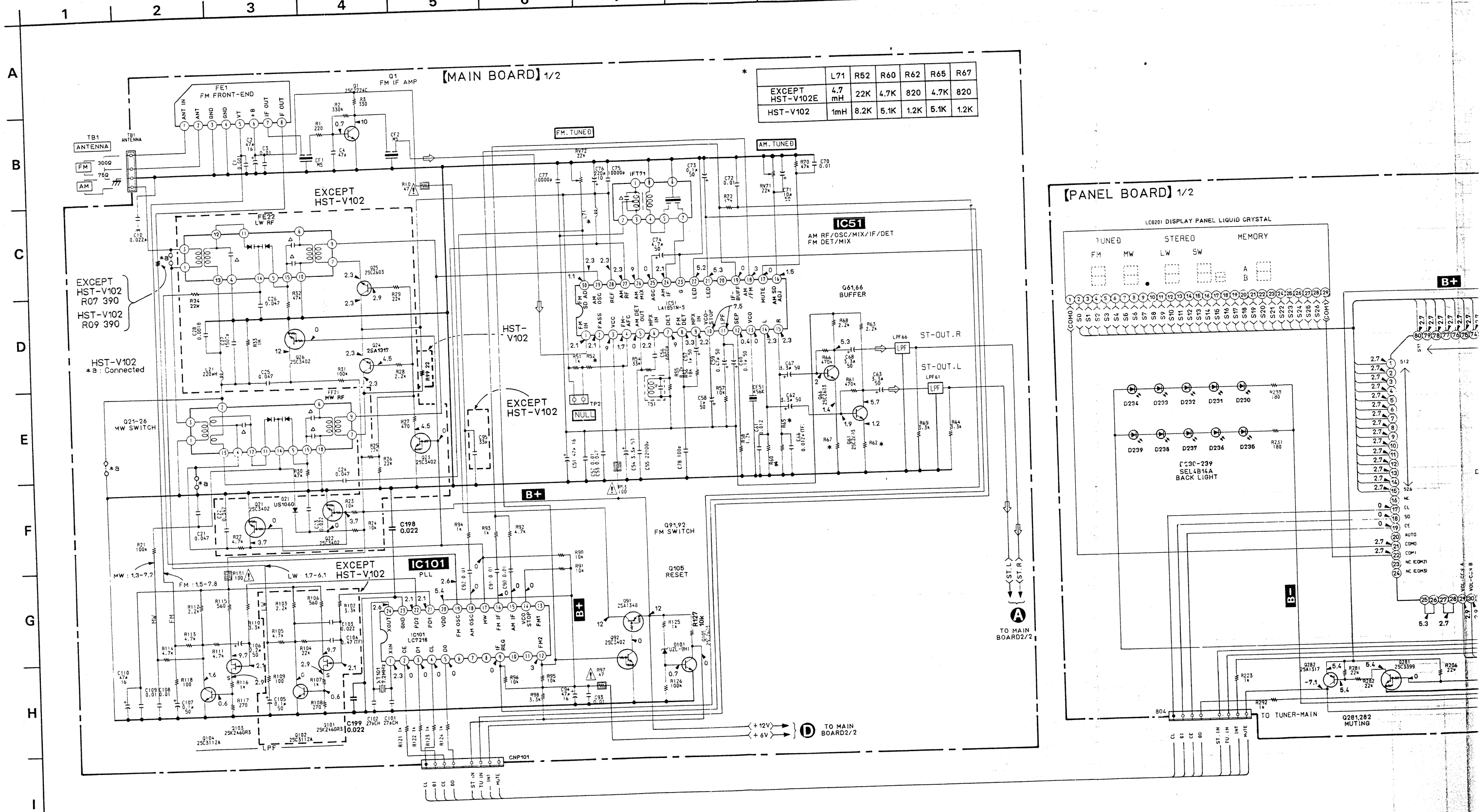


HMK-V82/V102  
HST-V102/V202

HMK-V82/V102  
HST-V102/V202



# 3-5. SCHEMATIC DIAGRAM —TUNER SECTION—



8

9

10

11

12

13

14

15

16

17

18

19

20

21

22

23

A

B

C

D

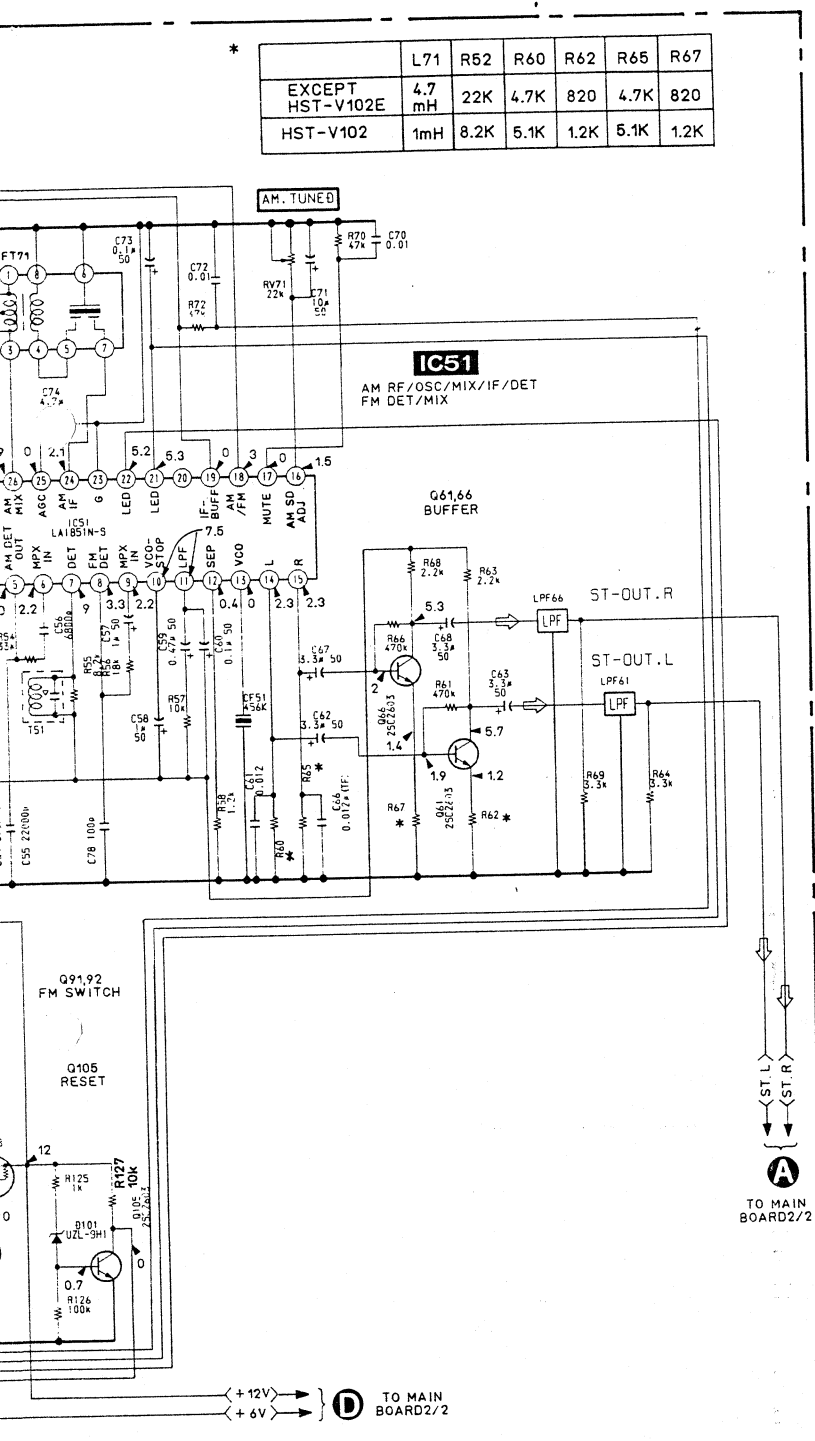
E

F

G

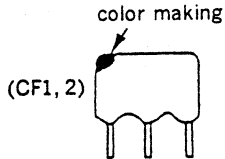
H



I




### Note on Ceramic Filter (C1, 2) Replacement.

This set employs two ceramic filters (CF1, 2) which should have the same color marking to identify their center frequency. Therefore FM IF offset adjustment by jumpers (\* A, \* B) is necessary to match the center frequency of the ceramic filters used with FM intermediate frequency.



- All capacitors are in  $\mu\text{F}$  unless otherwise noted. pF:  $\mu\text{F}$  50WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in  $\Omega$  and  $\frac{1}{4}\text{W}$  or less unless otherwise specified.
- $\triangle$  : internal component.
-  : nonflammable resistor.
-  : fusible resistor.

**Note:** The components identified by mark  $\triangle$  or dotted line with mark  $\triangle$  are critical for safety. Replace only with part number specified.

- **B+** : B+ Line
- **B-** : B- Line
-  : adjustment for repair.
- Voltage and waveforms are dc with respect to ground under no-signal (detuned) conditions.
- no mark: FM
- Voltages are taken with a VOM (Input Impedance  $10\text{M}\Omega$ ). Voltage variations may be noted due to normal production tolerances.
- Signal path.

$\Rightarrow$  : FM  $\Rightarrow$  : PB (DECK A)

$\bigcirc$  : Connected  
 $\times$  : not Connected

Ceramic filter		Mount		FM intermediate frequency (MHz)
Color mark	Center frequency (MHz)	IF-50K * B	IF+50K * A	
white	10.750	$\times$	$\bigcirc$	10.750
Red	10.700	$\times$	$\times$	10.700
Black	10.650	$\bigcirc$	$\times$	10.650

FM intermediate frequency is determined by the three types as shown above. Ceramic filters of same center frequency, i. e. of same color coding, should be used for CF1 and CF2.

When replacing the ceramic filters, perform the FM Di-sriminator Adjustment.

### TEST-MODE BY DISPLAY-CONTROL MICROCOMPUTER (IC201)

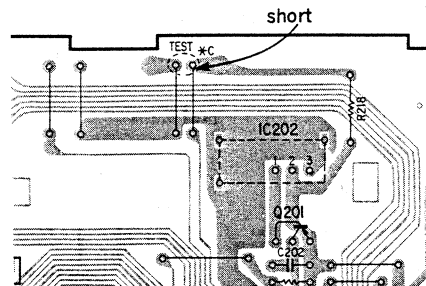
- If the power is turned on with the terminals of TEST (\* C) shorted, all the segments of LCD201 will light.
- When a this unit is delivered or the capacitor (C221) which supplies backup power to IC201 is shorted, the following frequencies will be restored into the internal memories of IC201.
- After repair, return the memory to the preceding state (content).

FM		MW		LW	
1	87.5MHz	1	531kHz	1	153kHz
2	93.0MHz	2	603kHz	2	173kHz
3	98.0MHz	3	999kHz	3	216kHz
4	103.0MHz	4	1404kHz	4	261kHz
5	108.0MHz	5	1602kHz	5	279kHz
Last Channel	87.5MHz	Last Channel	531kHz	Last Channel	153kHz

### CONTROL BOARD

—Conductive Side—

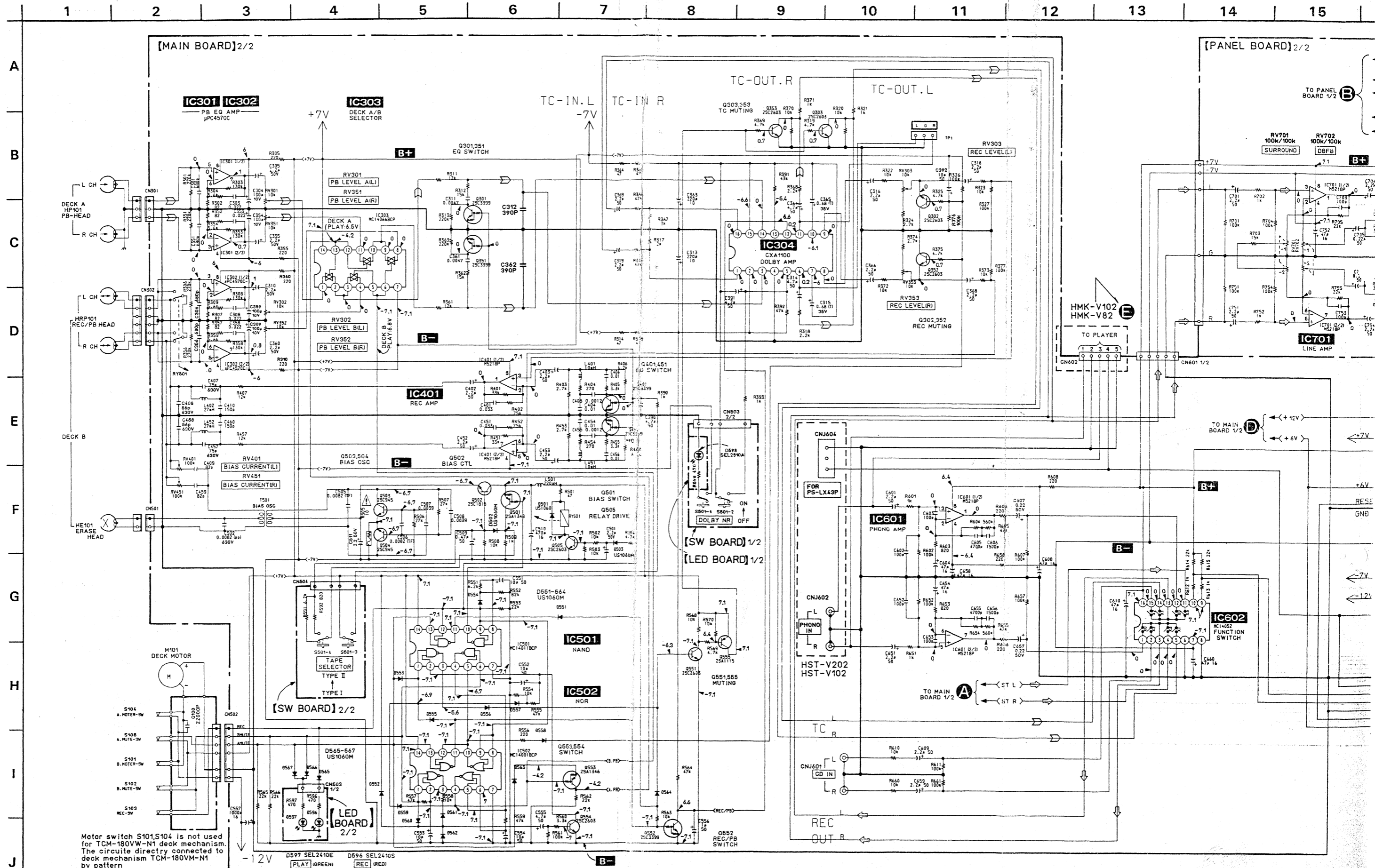
PANEL BOARD Location (27, A) see page 14



HMK-V82/V102  
HST-V102/V202

HMK-V82/V102  
HST-V102/V202

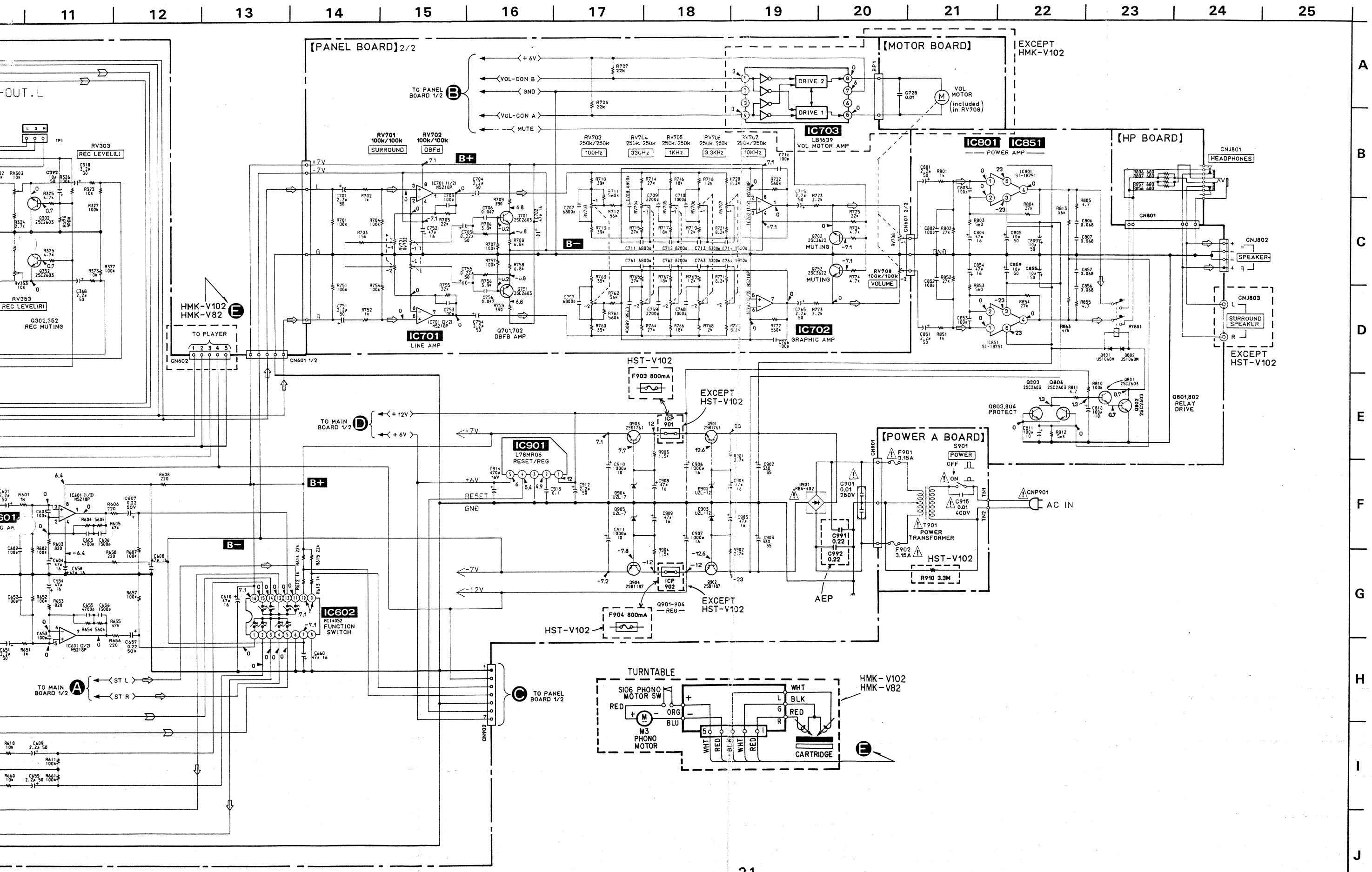
3-6. SCHEMATIC DIAGRAM —MAIN SECTION—



Motor switch S101/S104 is not used for TCM-180VW-N1 deck mechanism. The circuit directly connected to deck mechanism TCM-180VM-N1 by pattern

HMK-V82/V102  
HST-V102/V202

HMK-V82/V102  
HST-V102/V202



## SECTION 2 ADJUSTMENTS • Refer to page 6 for Adjustment Location.

### 2-1. MECHANICAL ADJUSTMENTS

#### PRECAUTION

- Clean the following parts with a denatured alcohol-moistened swab :
 

record/playback heads	pinch rollers
erase heads	rubber belts
capstan	idlers
- Demagnetize the record/playback head with a head demagnetizer.
- Do not use a magnetized screwdriver for the adjustments.
- After the adjustments, apply suitable locking compound to the parts adjusted.
- The adjustments should be performed with the rated power supply voltage unless otherwise noted.

#### Torque Measurement

Torque	Torque ment	Meter reading
FWD	CQ-102C	30—70g•cm (0.42—0.97oz•inch)
FWD Back tension	CQ-102C	1.5—5.5g•cm (0.020—0.076oz•inch)
FF. REW	CQ-201B	63g•cm or more (0.87oz•inch)

### 2-2. ELECTRICAL ADJUSTMENTS

0dB=0.775V (AF)  
0dB=0.1μV (RF)

#### CASSETTE DECK SECTION

- Demagnetize the record/playback head with a head demagnetizer. (Do not bring the head demagnetizer close to the erase head.)
- Do not use a magnetized screwdriver for the adjustments.
- After the adjustments, apply suitable locking compound to the parts adjusted.
- The adjustments should be performed with the rated power supply voltage unless otherwise noted.
- The adjustments should be performed in the order given in this service manual. (As a general rule, playback circuit adjustment should be completed before performing recording circuit adjustment.)
- The adjustments should be performed for both L-CH and R-CH.

- Switches and controls should be set as follows unless otherwise specified.

DOLBY NR switch : OFF  
TAPE SELECT switch : TYPE I

Type	Signal	Used for
P-4-A063	6.3kHz, -10dB	Azimuth Adjustment
P-4-L300	315Hz, 0dB	PB Level Adjustment
WS-48B	3kHz, 0dB	Tape Speed Adjustment

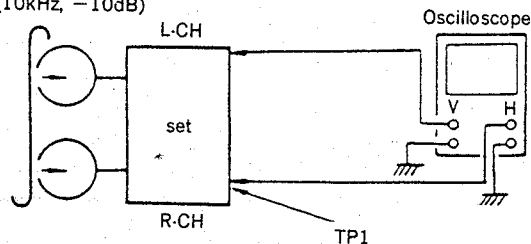
#### Record/Playback Head Azimuth Adjustment

Note: Perform this adjustments for both decks.

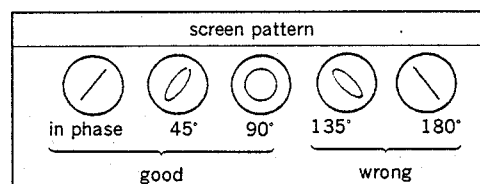
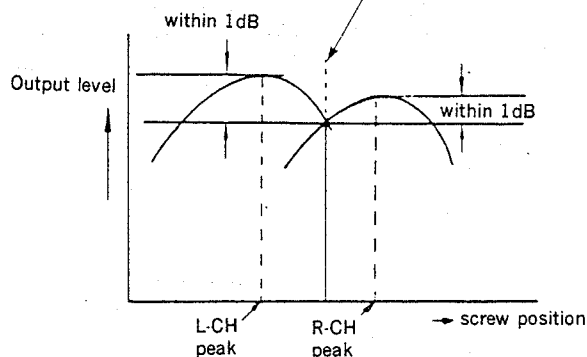
#### Procedure :

- Mode: FWD playback

test tape  
P-4-A100  
(10kHz, -10dB)

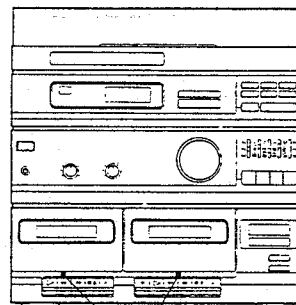


- Turn the adjustment screw and check output peaks. If the peaks do not match for L-CH and R-CH, turn the adjustment screw so that outputs match within 1 dB of peak.

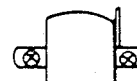


- After the adjustments, apply suitable locking compound to the parts adjusted.

#### Adjustment Location :



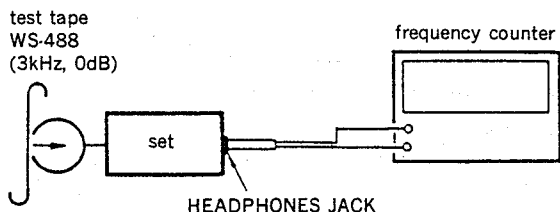
Adjustment screw  
REC/PB head (deck B) or  
PB head (deck A)



## Tape Speed Adjustment

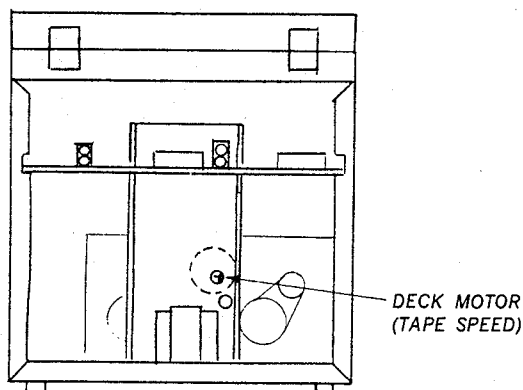
### Procedure :

Mode : playback



1. Playback WS-48B (Tape center portion) in FWD mode.
2. Adjustment the deck A, deck B so that at this time the frequency counter reads  $3000 \pm 30\text{Hz}$ .  
Frequency difference between the beginning and the end of the tape should be within 1.5%.

**Adjustment Location : DECK MOTOR (BOTTOM SIDE)**

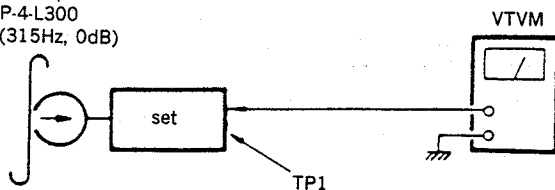


## Playback Level Adjustment

### Procedure :

Mode : FWD playback

test tape  
P-4-L300  
(315Hz, 0dB)



DECK-A side RV301 (L-CH), RV351 (R-CH)

DECK-B side RV302 (L-CH), RV352 (R-CH)

so that the limits below are satisfied.

### Adjustable limits :

TP1 level :  $-1.7\text{dB}$  to  $-3.7\text{dB}$

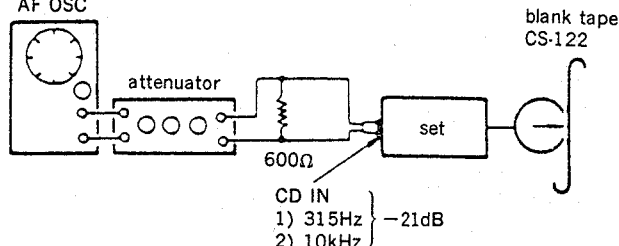
level difference between the channels : within 1.0dB

(See page 6 for Adjustment Location)

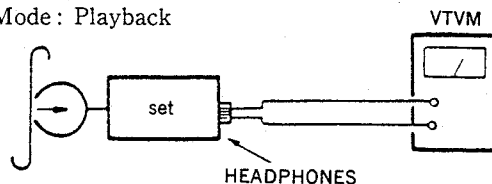
## Record BIAS Current Adjustment

### Procedure :

1. Mode : record  
AF OSC



2. Mode : Playback



- (1) Supply a  $-21\text{dB}$  signal (315Hz) from the CD IN. Adjust the VOLUME control so that a  $-30\text{dB}$  signal is output to the headphones terminal.
- (2) Insert alignment tape CS-122 into deck B and put the set into the REC mode.
- (3) Adjust the signal frequency to 10kHz.
- (4) Put the set into the PB mode and adjust RV401 (L CH) and RV451 (R CH) in the REC mode so that the level difference between 315Hz and 10kHz is within  $0 \pm 0.5\text{dB}$ .
- (5) Repeatedly put the set into the REC and PB modes two to four times and adjust the bias.

### Adjustable limits :

The HEADPHONES level of 10kHz signal relative to that of 315Hz :  $0\text{dB} \pm 0.5\text{dB}$

(See page 6 for Adjustment Location)

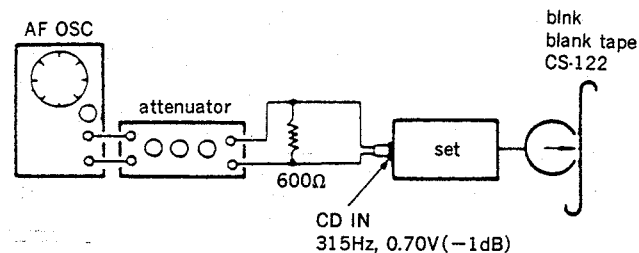
## Record Level Adjustment

### Setting :

TAPE SELECT : TYPE I

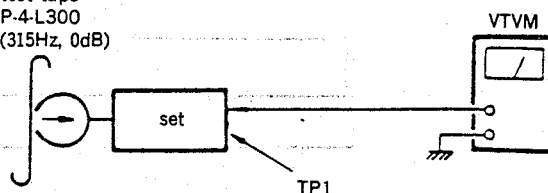
### Procedure :

1. Mode : record



2. Mode : playback

test tape  
P-4-L300  
(315Hz, 0dB)



• Refer to page 18 for TEST-MODE BY DISPLAY-CONTROL MICROCOMPUTER. (IC201)

- (1) Supply a  $-22.7\text{dB}$  signal (315Hz) from the CD terminal.
- (2) Insert alignment tape CS-122 into deck B and record the signal. Then playback the recorded portion of the tape and adjust RV303 (L-CH) and RV353 (R-CH) so that the  $-25.0\text{dB}$  signal output is obtained at TP1 terminal.

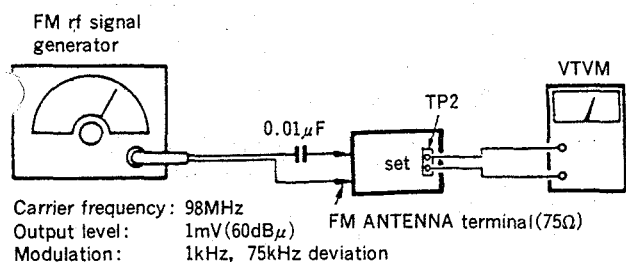
**Adjustable limits :**

HEADPHONES level :  $-25.0\text{dB} + 0.5\text{dB}$

**TUNER SECTION**

As FM FRONT-END FE1 is difficult to repair if faulty, replace it with new one.

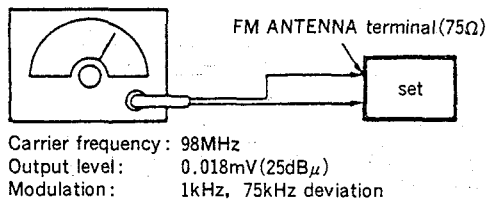
**FM NULL Adjustment**



**Procedure :**

1. Tune the set to 98MHz
2. Adjust T51 for 0V reading on the VTVM.

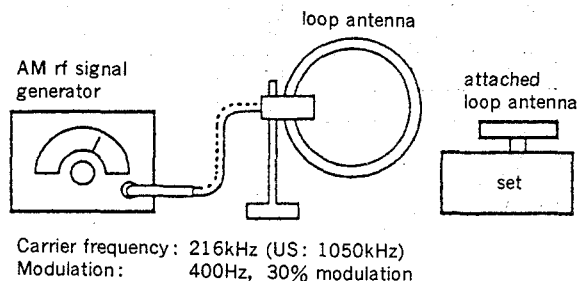
**FM Tuned Level Adjustment**



**Procedure :**

1. Tune the set to 98MHz.
2. Adjust RV72 to the point where "TUNED" sign on LCD201 just turns light.

• **AM SECTION**



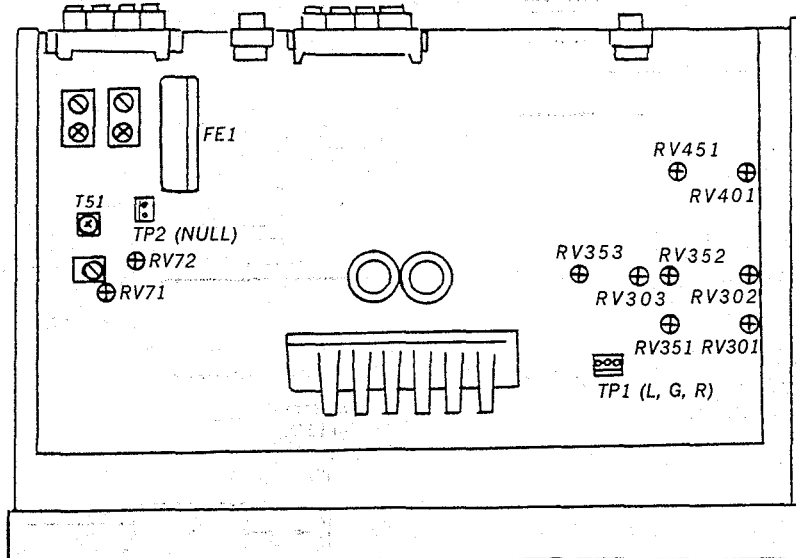
**AM Tuned Level Adjustment**

• **LW BAND (US: MM BAND)**

1. Set loop antenna input level to 2.5mV (68dBμ/m) and tune the set to the signal.
2. Tune the set to 216kHz. (US: 1050kHz)
3. Adjust RV71 to the point where "TUNED" sign on LCD201 just turns light.

**Adjustment Location :**

**MAIN BOARD—Component Side—**



FRONT SIDE

## SECTION 4 EXPLODED VIEWS

**HMK-V82/V102  
HST-V102/V202**

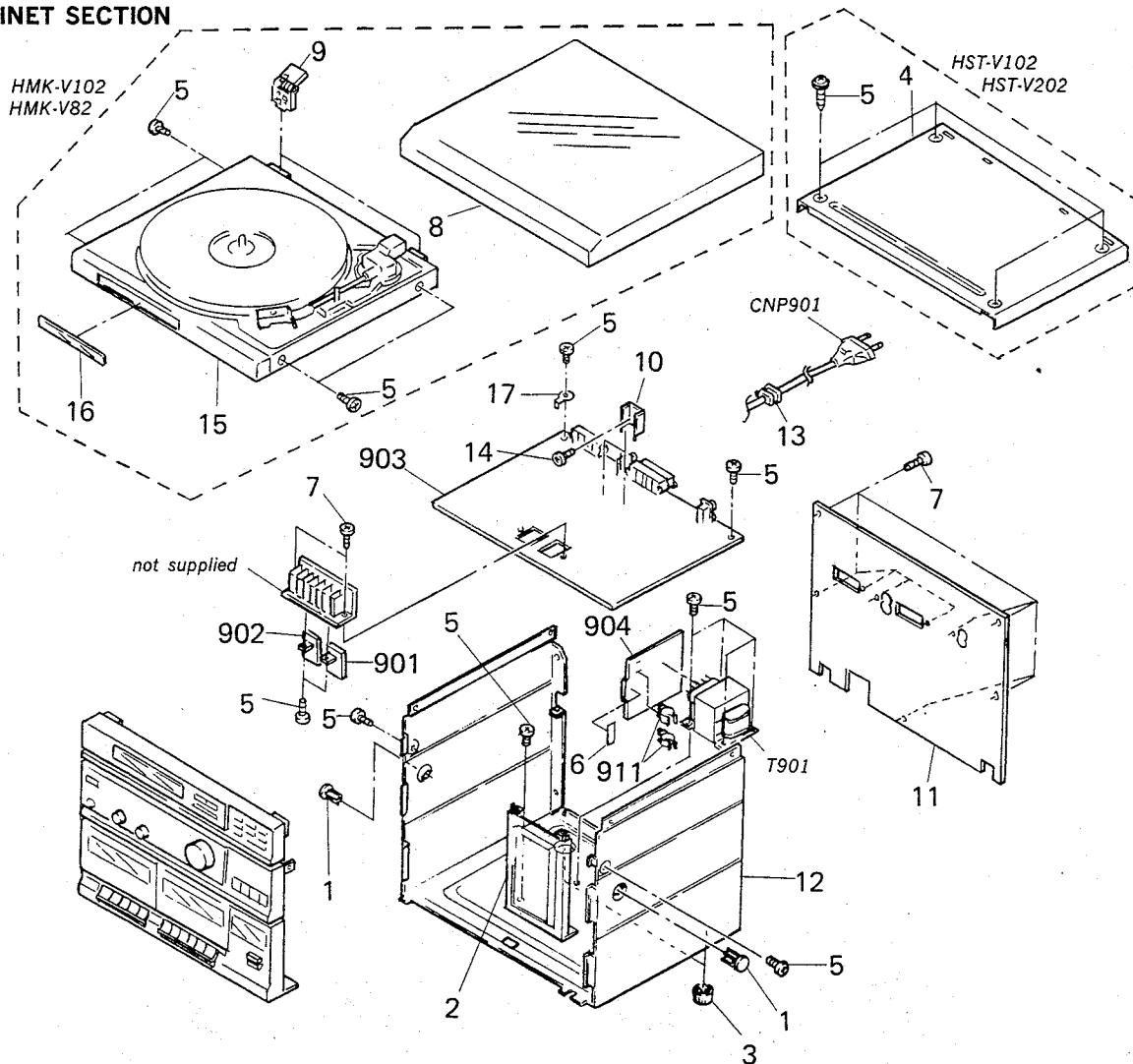
### NOTE:

- The mechanical parts with no reference number in the exploded views are not supplied.
- The construction parts of an assembled part are indicated with a collation number in the remark column.
- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- Due to standardization, parts with part number suffix -XX and -X may be different from the parts specified in the components used on the set.
- Color Indication of Appearance Parts  
Example:  
(RED) ... KNOB, BALANCE (WHITE)  

↑  
Cabinet's Color
↑  
Parts Color

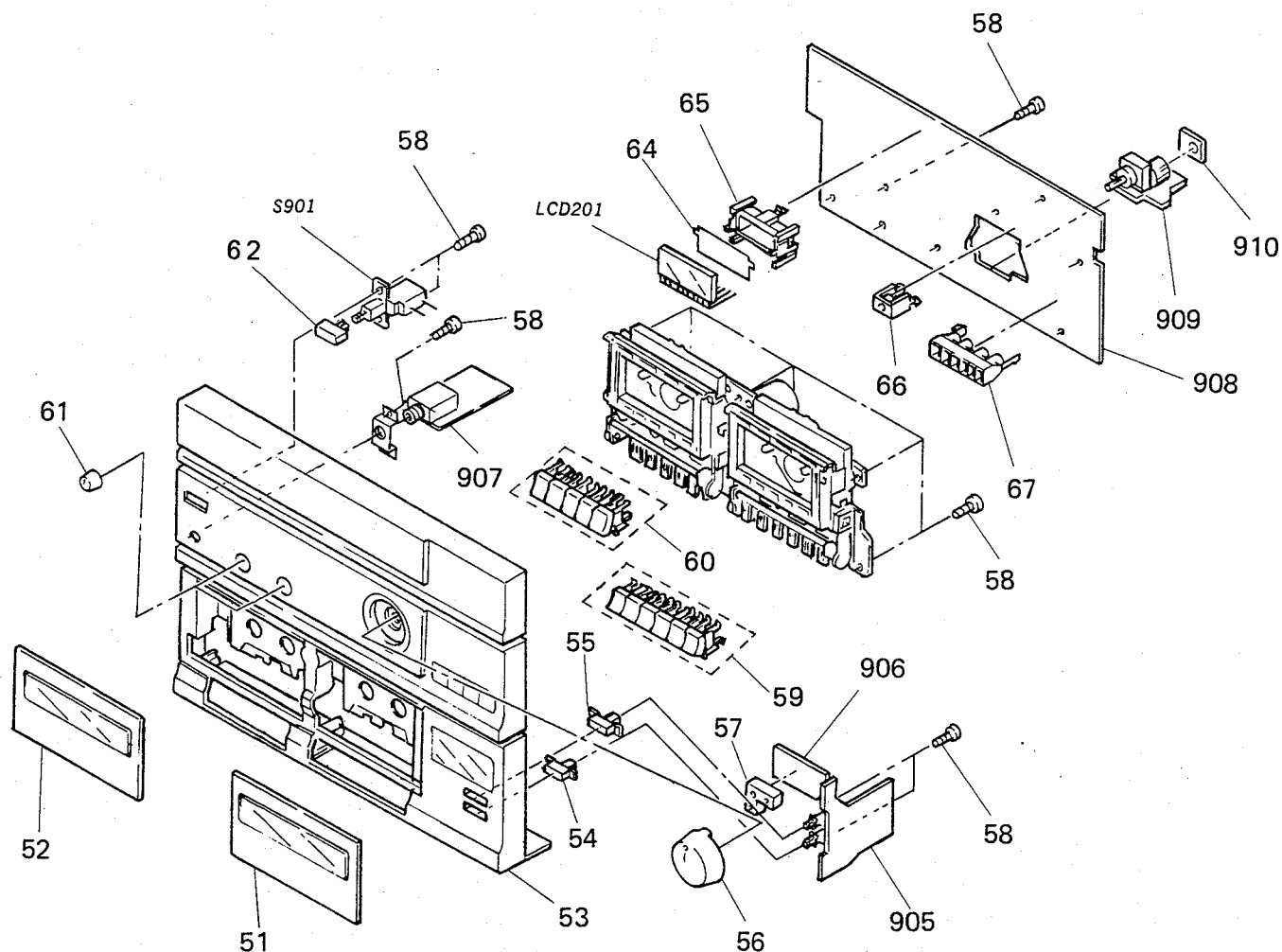
The components identified by mark or dotted line with mark are critical for safety. Replace only with part number specified.

### 4-1. CABINET SECTION





No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
1	4-935-307-03	HOLDER, PC BOARD		15	4-895-937-01	(HMK-V82/V102)...CABINET, MAIN	
2	*4-935-306-11	BRACKET (H)		16	4-895-938-01	(HMK-V82/V102)...WINDOW, FRONT	
3	4-933-601-01	FOOT		17	*4-904-446-01	PLATE, GROUND	
4	4-935-304-13	(HST-V102/V202)...CASE (T)		901	*1-633-063-11	PC BOARD, IC-L	
5	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S		902	*1-633-064-11	PC BOARD, IC-R	
6	*3-701-946-25	(HST-V102)...LABEL (3.15A 125V), FUSE		903	*A-4334-136-A	(HMK-V102/V82:AEP)...MOUNTED PCB, MAIN	
7	7-685-648-79	SCREW +BVTP 3X12 TYPE2 N-S			*A-4334-150-A	(HMK-V102:UK).....MOUNTED PCB, MAIN	
8	X-4895-506-1	(HMK-V82/V102)...COVER ASSY, DUST			*A-4334-468-A	(HST-V202:AEP).....MOUNTED PCB, MAIN	
9	4-895-936-01	(HMK-V82/V102)...HINGE			*A-4334-474-A	(HST-V202:UK).....MOUNTED PCB, MAIN	
10	*4-880-403-11	HEAT SINK			*A-4334-811-A	(HST-V102:US).....MOUNTED PCB, MAIN	
11	4-930-776-11	(HMK-V82).....PANEL, BACK		△CNP901.1-551-478-00	(HST-V102)...CORD, POWER		
	4-930-776-31	(HMK-V102).....PANEL, BACK		△CNP901.1-555-750-00	(AEP).....CORD, POWER		
	4-935-315-11	(HST-V202:AEP) ...PANEL, BACK		△CNP901.1-556-035-00	(UK).....CORD, POWER		
	4-935-315-21	(HST-V202:UK).....PANEL, BACK					
	*4-935-316-31	(HST-V102).....PANEL, BACK		904	*1-633-065-11	PC BOARD, POWER (A)	
12	*4-935-301-61	(HMK-V102/V82)...CHASSIS		911	*1-533-189-11	HOLDER, FUSE	
	*4-935-301-71	(HST-V102/V202)...CHASSIS		T901	△.1-449-873-21	(EXCEPT HST-V102)...TRANSFORMER, POWER	
13	*3-703-244-00	BUSHING (2104), CORD		T901	△.1-450-046-21	(HST-V102).....TRANSFORMER, POWER	
14	7-682-548-04	SCREW +BVTT 3X8 (S)					

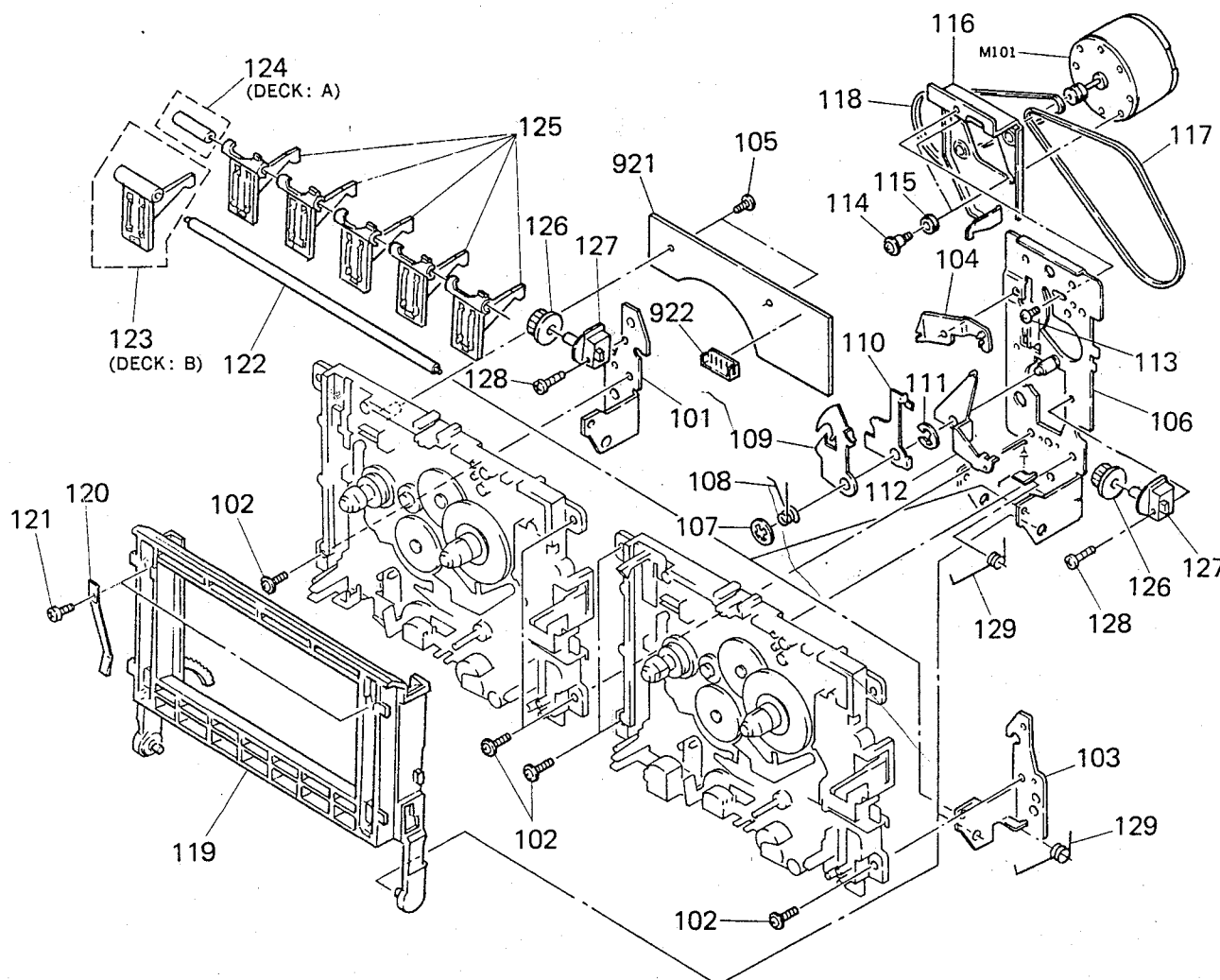
## 4-2. FRONT PANEL SECTION



No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
51	A-4323-381-A	(EXCEPT HST-V102) ...LID (B) ASSY, CASSETTE		62	4-930-783-11	BUTTON (PO)	
	A-4323-489-A	(HST-V102)...LID (B) ASSY, CASSETTE		64	*4-935-303-11	ILLUMINATOR (LCD)	
52	A-4323-380-A	(EXCEPT HST-V102) ...LID (A) ASSY, CASSETTE		65	*4-930-786-11	HOLDER (LL)	
	A-4323-488-A	(HST-V102)...LID (A) ASSY, CASSETTE		66	*4-930-781-11	(EXCEPT HMK-V102)...HOLDER (V0), LED	
53	A-4323-384-A	(HMK-V102)...PANEL ASSY, FRONT		67	*4-930-780-11	HOLDER (FU), LED	
	A-4323-443-A	(HST-V202)...PANEL ASSY, FRONT		905	*1-633-067-11	PC BOARD, SW	
	A-4323-472-A	(HST-V102)...PANEL ASSY, FRONT		906	*1-633-066-11	PC BOARD, LED	
	A-4323-546-A	(HMK-V82) ...PANEL ASSY, FRONT		907	*1-633-068-11	PC BOARD, HP	
54	4-930-794-31	BUTTON (DT)(DOLBY)		908	*A-4334-132-A	(HMK-V82:AEP,HST-V202:AEP) ...MOUNTED PCB, PANEL	
55	4-930-794-21	BUTTON (DT)(TAPE)			*A-4334-146-A	(HMK-V102:UK)...MOUNTED PCB, PANEL	
56	A-4323-382-A	KNOB (V0) ASSY			*A-4334-188-A	(HMK-V102:AEP)...MOUNTED PCB, PANEL	
57	*4-930-793-11	HOLDER (TC), LED			*A-4334-471-A	(HST-V202:UK)...MOUNTED PCB, PANEL	
58	4-928-635-21	SCREW, +BV (2.6X10) TAPPING			*A-4334-809-A	(HST-V102:US)...MOUNTED PCB, PANEL	
59	4-930-797-11	BUTTON (MD-B)		909	*1-633-070-11	PC BOARD, VOL	
60	4-930-796-11	BUTTON (MD-A)		910	*1-633-072-11	(EXCEPT HMK-V102)...PC BOARD, MOTOR	
61	4-930-784-11	KNOB (SD)		LCD201	1-808-810-11	DISPLAY PANEL, LIQUID CRYSTAL	
				S901	*1-572-109-11	SWITCH, PUSH (AC POWER)(1 KEY)	

**Note:** The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

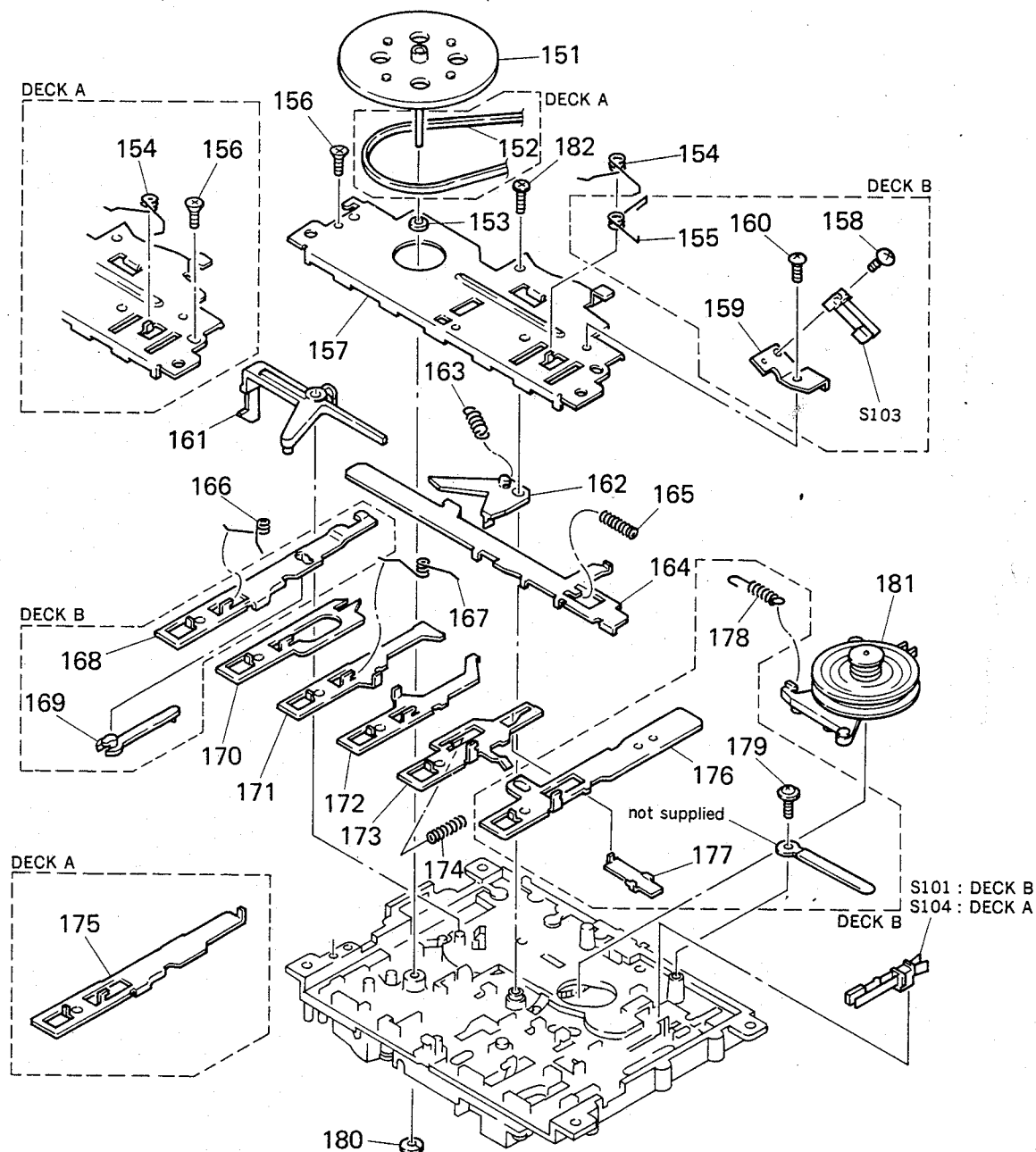
4-3. MECHANISM DECK SECTION (1) .... HMK-V102  
(TCM-YMW47C-97) HST-V201/V202



Ref.No	Part No.	Description	Remark
101	3-390-854-01	HOLDER (LEFT), BUTTON	
102	7-621-770-67	SCREW (BVTT WH 2.6X6)	
103	3-392-164-01	HOLDER (RIGHT), BUTTON	
104	4-895-002-01	P CONNECT LEVER ASSY	
105	7-685-134-19	SCREW +P 2.6X8 TYPE2 NON-SLIT	
106	3-390-859-01	JOINT ASSY	
107	7-624-190-11	STOP RING 3, TYPE-CS	
108	4-895-003-01	SRING	
109	4-895-004-01	LOCK PLATE	
110	4-895-005-01	UNLOCK PLATE	
111	7-624-106-04	STOP RING 3.0, TYPE -E	
112	4-895-006-01	CONNECT LEVER	
113	7-621-770-87	SCREW +PTT 2.6X5 (S)	
114	3-390-850-01	SCREW MOTOR	
115	*3-390-853-01	CUSHION	
116	*3-390-851-01	BRACKET, MOTOR	

Ref.No	Part No.	Description	Remark
117	3-390-847-01	BELT	
118	3-390-852-01	BELT, SQUARE	
119	3-390-801-01	CASSETTE CASE	
120	4-894-951-01	KEEP PLATE	
121	7-685-103-19	T. SCREW	
122	4-894-970-01	BUTTON SHAFT W	
123	3-390-856-01	(DECK B)....HOLDER (RIGHT), BUTTON	
124	4-895-018-01	(DECK A)....SPACER	
125	4-894-971-01	BUTTON LEVER	
126	3-392-144-01	DUMPER GEAR	
127	3-392-143-01	HOLDER GEAR	
128	7-685-856-01	D. SCREW	
129	4-894-973-01	SPRING	
921	*1-634-251-11	PC BOARD, TRANSLATION	
922	*1-564-499-11	PIN, CONNECTOR 6P	
M101	X-3390-803-1	MOTOR ASSY	

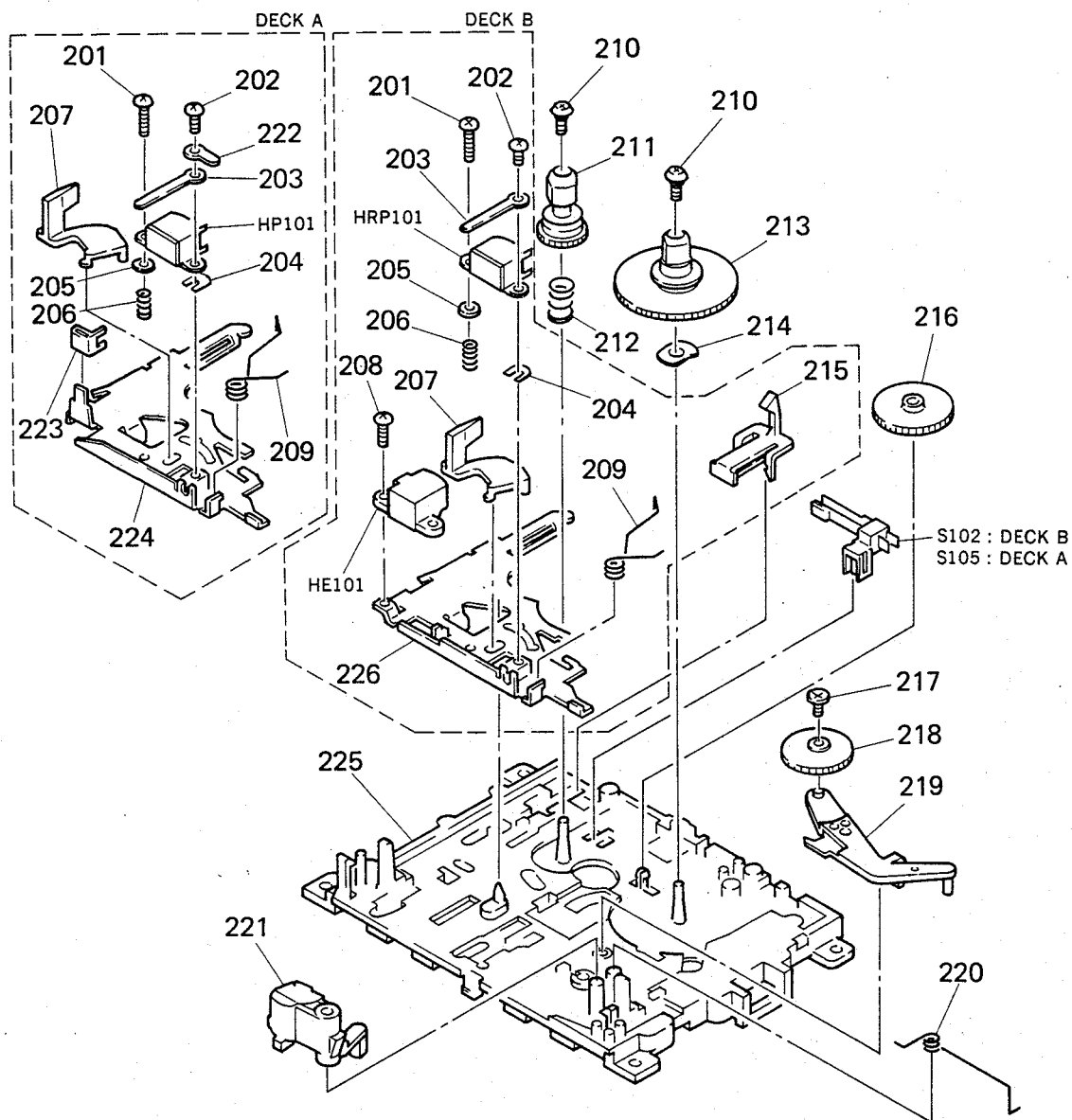
**4-4. MECHANISM DECK SECTION (2) .... HMK-V102**  
**(TCM-YMW47C-97) HST-V102/V202**



Ref.No	Part No.	Description	Remark
151	3-390-806-11	FW ASSY	
152	3-561-892-00	BELT, SQUARE	
153	4-894-976-01	P WASHER	
154	4-894-978-01	SPRING	
155	4-894-979-01	SPRING	
156	7-685-234-19	SCREW +KTP 2.6X8 TYPE2NON-SLIT	
157	*4-894-977-01	BACK PLATE	
158	7-621-770-87	SCREW +PTT 2.6X5 (S)	
159	3-390-855-01	PLATE, PSW	
160	7-621-255-25	SCREW +PTT 2X4 (S)	
161	*4-894-980-01	EJECT ARM	
162	4-894-982-01	S ARM	
163	3-390-809-01	SPRING	
164	4-894-984-01	FUNCTION LEVER	
165	4-894-983-01	C SPRING	
166	4-894-989-01	SPRING	
167	4-894-999-01	SPRING	
168	*4-894-986-01	PAUSE LEVER	

Ref.No	Part No.	Description	Remark
169	4-894-985-01	PAUSE ARM	
170	*4-894-987-01	S.E LEVER	
171	*4-894-988-01	FF LEVER W	
172	*4-894-990-01	REW LEVER	
173	3-390-810-01	LEVER, PLAY	
174	3-390-827-01	SPRING	
175	4-895-011-01	PAUSE LEVER W	
176	*4-894-994-01	REC LEVER	
177	3-390-811-01	LEVER, REC STOP	
178	3-390-848-01	SPRING, TENSION	
179	7-687-233-11	SCREW (+ PTPWH) (2.6X6)	
180	4-894-969-01	N WASHER	
181	4-894-997-01	POWER ARM ASSY	
182	3-390-822-01	BUSHING (C)	
S101	1-570-715-11	(DECK B)....SWITCH, LEAF	
S103	1-572-040-11	(DECK B)....SWITCH, LEAF	
S104	1-570-715-11	(DECK A)....SWITCH, LEAF	

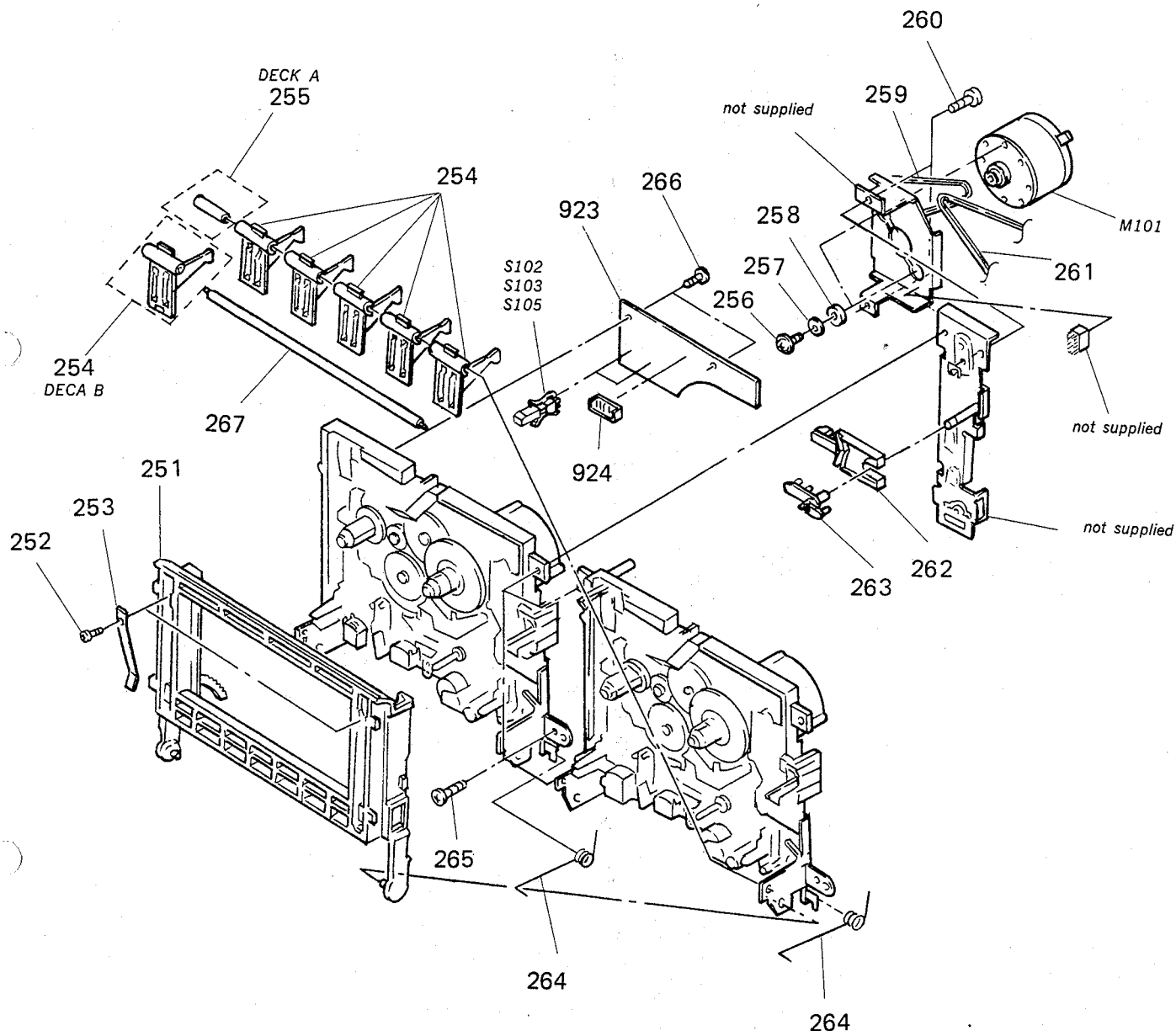
4-5. MECHANISM DECK SECTION (3) .... HMK-V102  
(TCM-YMW47C-97) HST-V102/V202



Ref.No	Part No.	Description	Remark
201	7-621-255-55	SCREW,TOTSU P 2X8	
202	7-621-255-15	SCREW +P 2X3	
203	3-390-819-01	LUG	
204	3-390-821-01	SPACER	
205	3-390-823-01	WASHER, F	
206	4-894-955-01	C SPRING	
207	4-894-956-01	TAPE SENSOR	
208	7-621-771-06	SCREW +B 2X5	
209	3-390-804-01	SPRING, PINCH ARM	
210	3-390-803-01	BUSHING (D)	
211	4-894-953-01	S REEL	
212	4-894-954-01	C SPRING	
213	4-894-963-01	T REEL ASSY	
214	3-390-820-01	SPRING, LEAF	
215	4-894-958-01	INTERLOCK ARM	
216	4-894-964-01	F GEAR	

Ref.No	Part No.	Description	Remark
217	4-894-960-01	BUSH	
218	4-894-961-01	IDLER GEAR	
219	4-894-962-01	IDLER ARM	
220	4-894-967-01	SPRING	
221	3-390-805-01	ROLLER ASSY, PINCH	
222	3-390-817-01	LUG	
223	4-895-016-01	TAPE GUIDE	
224	4-895-015-01	HEAD BASE	
225	4-894-968-01	CHASSIS ASSY	
226	*4-894-957-01	HEAD BASE B	
HE101	1-543-673-11	HEAD, MAGNETIC (ERASE)	
HP101	1-543-672-11	(DECK A)....HEAD, MAGNETIC (REC/PB)	
HRP101	1-543-672-11	(DECK B)....HEAD, MAGNETIC (REC/PB)	
S102	1-570-430-11	(DECK B)....SWITCH, LEAF	
S105	1-570-430-11	(DECK A)....SWITCH, LEAF	

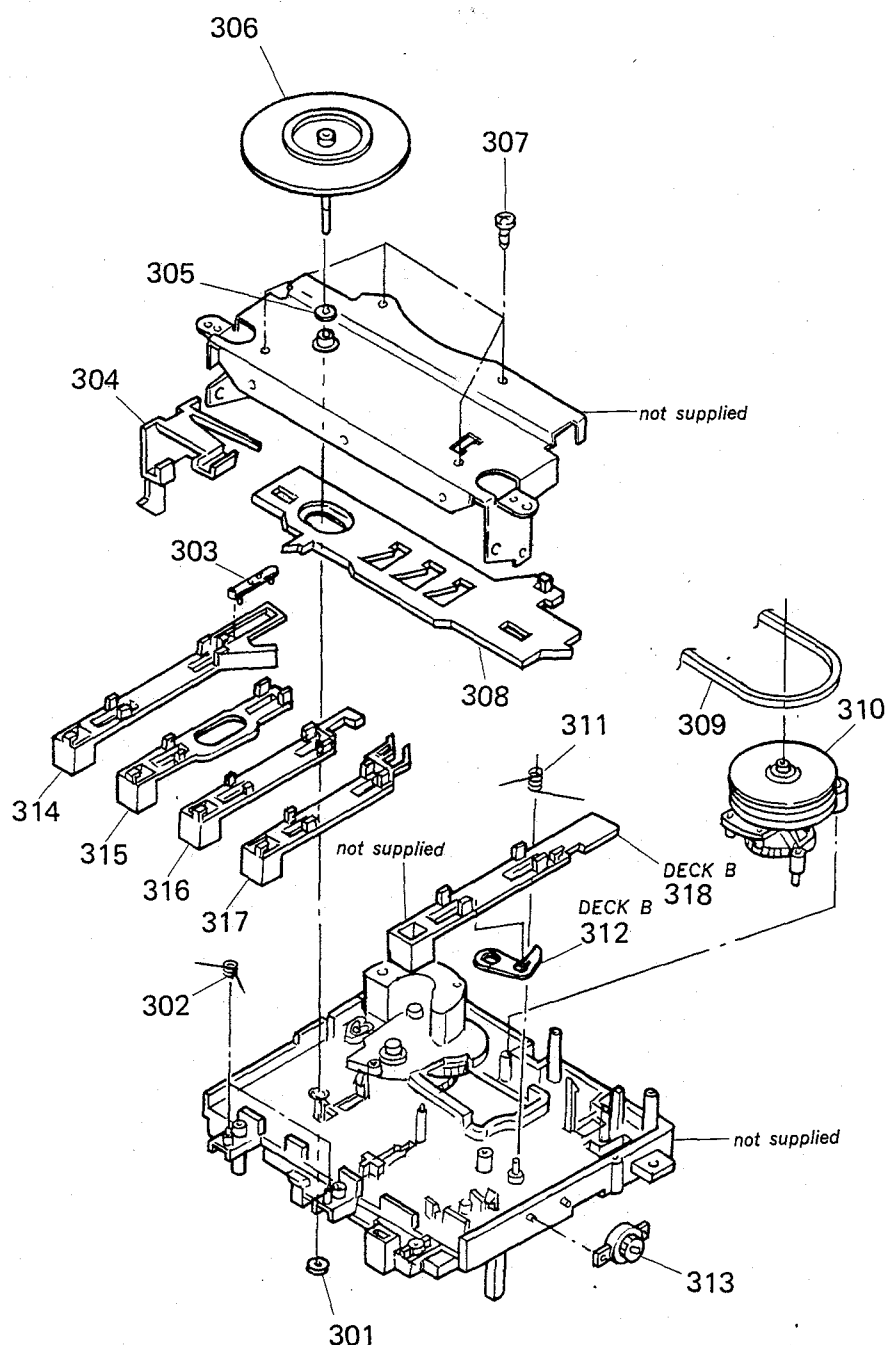
**4-6. MECHANISM DECK SECTION (4) .... HMK-V82/V102**  
**(TCM-180VW-N1) HST-V102/V202**



No.	Part No.	Description	Remarks
251	3-358-266-01	HOLDER, CASSETTE	
252	7-685-103-19	SCREW +P 2X5 TYPE2 NON-SLIT	
253	3-358-209-01	SPRING (CASSETTE HOLDER), LEAF	
254	3-358-210-01	LEVER (BUTTON BASE C)	
255	*3-358-216-01	(DECK A)...COLLAR	
256	3-570-027-00	SCREW, MOTOR	
257	7-623-925-01	WASHER 4.0, NYLONE	
258	3-570-118-00	CUSHION, MOTOR	
259	3-358-230-01	BELT (A1)	
260	7-621-770-67	SCREW +BVTT 2.6X6 (S)	
261	3-358-211-01	BELT (W)	
262	3-358-202-01	SLIDER (TRIGGER)	

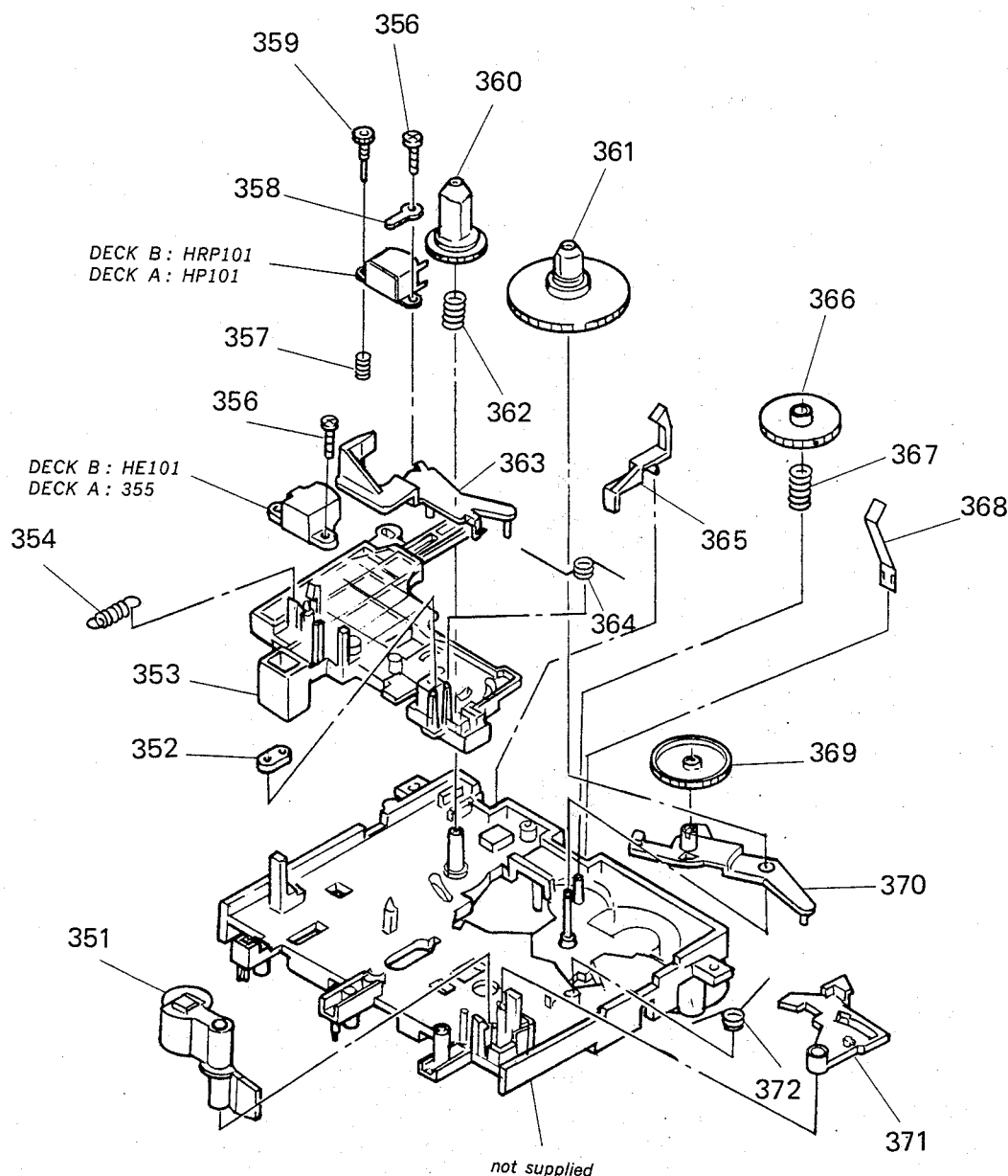
No.	Part No.	Description	Remarks
263	3-358-203-01	LEVER (TRIGGER)	
264	3-358-229-01	SPRING (LOADING), TORSION	
265	7-621-770-XX	SCREW +BVTT 2.6X8 (S)	
266	7-685-133-19	SCREW +BTP 2.6X6 TYPE2 N-S	
267	3-358-242-01	SHAFT (BUTTON SHAFT)	
923	*1-635-159-11	PC BOARD, SW	
924	*1-564-499-11	(TCM-180VW-N1)...PIN, CONNECTOR 6P	
M101	X-3358-201-1	MOTOR (W) ASSY	
S102	1-571-736-11	(TCM-180VW-N1)...SWITCH, LEAF	
S103	1-571-736-11	(TCM-180VW-N1)...SWITCH, LEAF	
S105	1-571-736-11	(TCM-180VW-N1)...SWITCH, LEAF	

# 4-7. MECHANISM DECK SECTION (5) .... HMK-V82/V102 (TCM-180VW-N1) HST-V102/V202



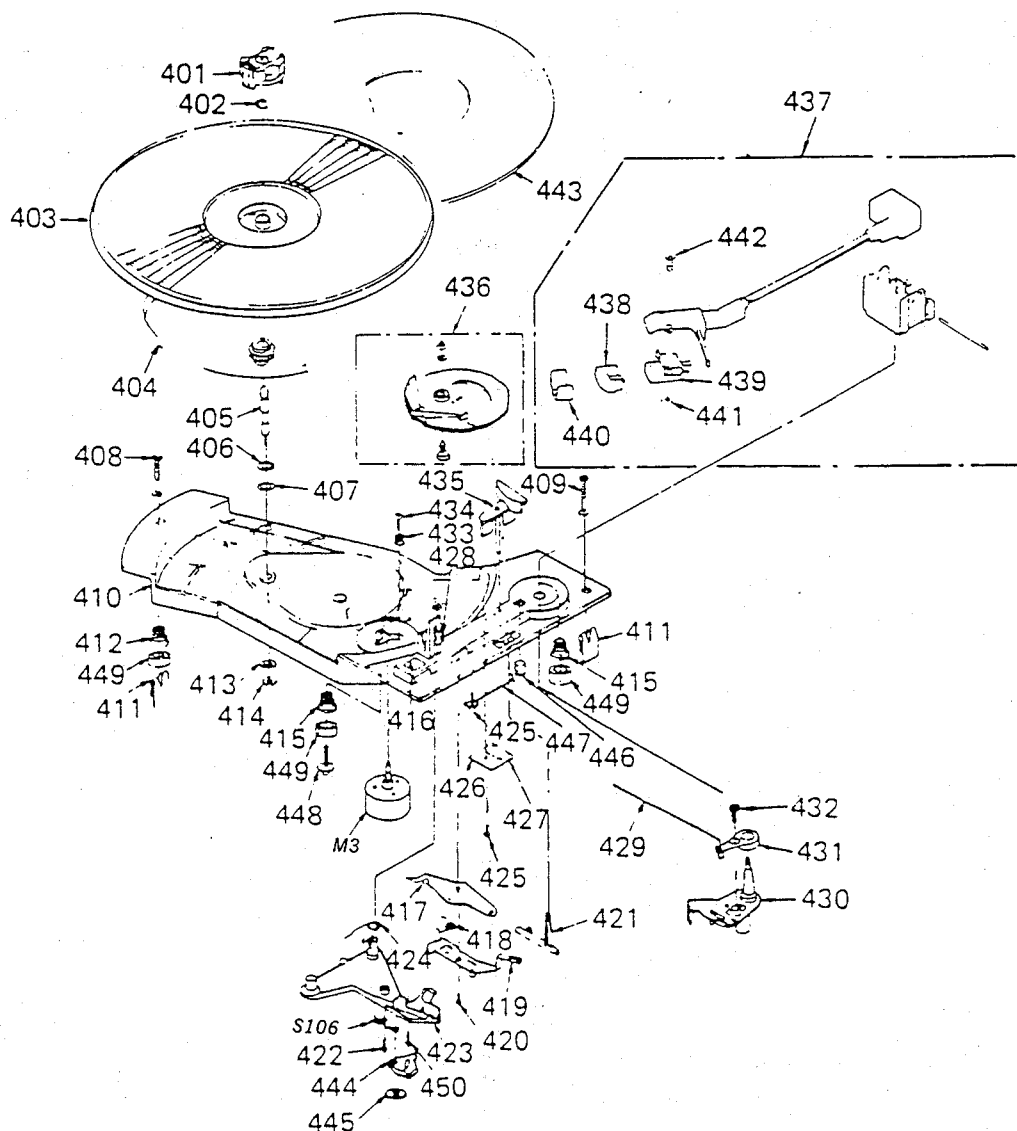
No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
301	7-623-921-01	WASHER 1.7, NYLONE		311	3-358-214-01	(DECK A)...SPRING (LOCK), TORSION	
302	3-358-232-01	SPRING (S-P F-R), TORSION			3-358-233-01	(DECK B)...SPRING (REC-LOCK), TORSION	
303	*3-358-226-01	LEVER (PAUSE LEVER)		312	*3-358-204-01	(DECK B)...LEVER (REC SAFETY)	
304	*3-358-261-01	SLIDER (HOLDER LOCK)		313	3-319-224-31	DAMPER, SMALL	
305	3-701-437-01	WASHER		314	3-358-260-01	SLIDER (PAUSE)	
306	X-3358-205-1	(DECK A)...FLYWHEEL (A) ASSY		315	3-358-256-01	SLIDER (STOP/EJECT)	
	X-3358-206-1	(DECK B)...FLYWHEEL (B) ASSY		316	3-358-257-01	SLIDER (FF)	
307	7-685-133-19	SCREW +P 2.6X6 TYPE1		317	3-358-258-31	SILDER (REW)	
308	*3-358-249-01	SLIDER (LOCK PLATE)		318	3-358-259-31	(DECK B).... SILDER (REC)	
309	3-358-230-01	BELT (A1)					
310	X-3358-202-1	LEVER (FR ARM) ASSY					

4-8. MECHANISM DECK SECTION (6) .... HMK-V82/V102  
(TCM-180VW-N1) HST-V102/V202



No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
351	X-3358-204-1	LEVER (PINCH LEVER) ASSY		364	3-358-228-01	SPRING, TORSION	
352	*3-358-215-01	BUSHING (WIRE KIT RETAINER)		365	*3-358-255-01	LEVER (GB LEVER)	
353	3-358-265-01	SLIDER (HEAD PC BOARD A)		366	*3-358-224-01	GEAR (FF GEAR)	
354	3-358-217-01	SPRING, TENSION		367	3-358-207-01	SPRING (FF GEAR), COMPRESSION	
355	3-358-285-01	(DECK A)...GUIDE, TAPE		368	3-358-227-01	SPRING, LEAF	
356	7-685-105-19	TPG +P 2X8, TYPE 2, NON-SLIT		369	*3-358-225-01	GEAR (TU GEAR)	
357	3-358-234-01	SPRING (AZIMUTH), COMPRESSION		370	*3-358-252-01	LEVER (TU ARM)	
358	7-623-505-01	LUG, 2		371	*3-358-253-01	LEVER (SHUT-OFF LEVER)	
359	3-358-213-01	SCREW, AZIMUTH		372	3-358-243-01	SPRING (TU-SHUT), TORSION	
360	3-358-248-01	GEAR (SUPPLY REEL)		HE101	1-543-673-11	(DECK B)...HEAD, MAGNETIC (ERASE)	
361	X-3358-203-1	TABLE (T) ASSY, REEL		HP101	1-543-672-11	(DECK A)...HEAD, MAGNETIC (REC/PB)	
362	3-358-208-01	SPRING (SUPPLY), COMPRESSION		HRP101	1-543-672-11	(DECK B)...HEAD, MAGNETIC (REC/PB)	
363	*3-358-251-01	LEVER (TENSION DETECTION ARM)					

## 4-9. PLAYER SECTION .... HMK-V82/V102



No.	Part No.	Description	Remarks	No.	Part No.	Description	Remarks
401	4-895-521-01	ADAPTOR (B), 45		427	*4-895-529-01	BASE, SIDE	
402	4-895-020-01	E RING DIA.6		428	4-895-046-01	P.U. TUBE HOOK	
403	X-4895-501-2	TURNTABLE ASSY		429	*4-895-530-01	ROD	
404	4-895-022-01	BELT		430	*4-895-531-01	CAM	
405	4-895-524-01	SPINDLE, CENTER		431	4-895-532-01	CLUTCH	
406	4-895-024-01	POLY WASHER		432	4-895-533-01	SPRING	
407	4-895-025-01	FLAT WASHER		433	4-895-049-01	GROMMET (A)	
408	*4-895-525-01	SCREW (1), TRANSPORT		434	4-895-050-01	SCREW	
409	*4-895-526-01	SCREW (2), TRANSPORT		435	*4-895-534-01	PLATE, LIFTER	
410	*4-895-028-01	BASE		436	X-4895-502-1	GEAR ASSY, CAM	
411	*4-895-029-01	RETAINING CLIP		437	X-4896-005-1	ARM ASSY, PICK-UP	
412	*4-895-030-01	SPRING (B)		438	4-896-147-01	STYLUS	
413	4-895-031-01	W GEAR		439	4-896-146-01	CARTRIDGE	
414	4-895-032-01	NUT		440	*4-896-148-01	COVER, CARTRIDGE	
415	*4-895-033-01	SPRING (A)		441	4-896-145-01	NUT	
416	4-895-552-01	LID, FUNCTION		442	4-896-149-01	2BID 2608ZN3K	
417	4-895-035-01	SPEED SHIFT CAM 45		443	4-895-056-01	MAT	
418	4-895-036-01	SPRING		444	*4-895-550-01	CAM	
419	4-895-037-01	SPEED SHIFT CAM 33		445	4-303-605-00	PUSH NUT DIA.3	
420	4-895-038-01	7-CUP 3008		446	*4-895-058-01	VISCOUS SHAFT	
421	4-895-039-01	CUE LEVER		447	*4-895-059-01	VISCOUS WIRE	
422	4-895-040-01	7-BID 2006		448	4-895-935-01	SCREW	
423	*4-895-527-01	ARM, CONTROL		449	4-895-064-01	SPONGE	
424	4-895-042-01	ARM, CONTROL		450	7-685-649-79	SCREW (7-BID 3016 ZN3A)	
425	4-895-044-01	7-BID 3008		M3	4-895-034-01	MOTOR ASSY (PLAYER)	
426	*4-895-528-01	PLATE, MOTOR		S106	4-895-068-01	LIEF, SW (PLAYER)	

## SECTION 5

### ELECTRICAL PARTS LIST

**NOTE:**

- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- Items marked "\*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- If there are two or more same circuits in a set such as a stereophonic machine, only typical circuit parts may be indicated and capacitors and resistors in other same circuits may be omitted.

**CAPACITORS:**

MF:  $\mu$ F, PF:  $\mu$ F.

**RESISTORS**

- All resistors are in ohms.
- F: nonflammable

**COILS**

- MMH: mH, UH:  $\mu$ H

**SEMICONDUCTORS**

In each case, U:  $\mu$ , for example:

UA....:  $\mu$ A...., UPA....:  $\mu$ PA....,

UPC....:  $\mu$ PC, UPD....:  $\mu$ PD...

The components identified by mark or dotted line with mark are critical for safety. Replace only with part number specified.

Ref.No.	Part No.	Description	Ref.No.	Part No.	Description
901	*1-633-063-11	PC BOARD, IC-L	C054	1-123-382-00	ELECT 3.3MF 20% 50V
902	*1-633-064-11	PC BOARD, IC-R	C055	1-161-494-00	CERAMIC 0.022MF 25V
903	*A-4334-136-A	(HMK-V102/V82:AEP)...MOUNTED PCB, MAIN	C056	1-161-329-00	CERAMIC 0.0068MF 30% 16V
	*A-4334-150-A	(HMK-V102:UK).....MOUNTED PCB, MAIN	C057	1-124-791-11	ELECT 1MF 20% 50V
	*A-4334-468-A	(HST-V202:AEP).....MOUNTED PCB, MAIN	C058	1-124-791-11	ELECT 1MF 20% 50V
	*A-4334-474-A	(HST-V202:UK).....MOUNTED PCB, MAIN	C059	1-124-902-00	ELECT 0.47MF 20% 50V
	*A-4334-811-A	(HST-V102:US).....MOUNTED PCB, MAIN	C060	1-124-463-00	ELECT 0.1MF 20% 50V
904	*1-633-065-11	PC BOARD, POWER (A)	C061	1-136-154-00	FILM 0.012MF 5% 50V
905	*1-633-067-11	PC BOARD, SW	C062	1-123-382-00	ELECT 3.3MF 20% 50V
906	*1-633-066-11	PC BOARD, LED	C063	1-123-382-00	ELECT 3.3MF 20% 50V
907	*1-633-068-11	PC BOARD, HP	C066	1-136-154-00	FILM 0.012MF 5% 50V
908	*A-4334-132-A	(HMK-V82:AEP,HST-V202:AEP)	C067	1-123-382-00	ELECT 3.3MF 20% 50V
		...MOUNTED PCB, PANEL	C068	1-123-382-00	ELECT 3.3MF 20% 50V
	*A-4334-146-A	(HMK-V102:UK).....MOUNTED PCB, PANEL	C070	1-161-379-00	CERAMIC 0.01MF 30% 16V
	*A-4334-188-A	(HMK-V102:AEP).....MOUNTED PCB, PANEL	C071	1-123-875-11	ELECT 10MF 20% 50V
	*A-4334-471-A	(HST-V202:UK).....MOUNTED PCB, PANEL	C072	1-161-379-00	CERAMIC 0.01MF 30% 16V
	*A-4334-809-A	(HST-V102:US).....MOUNTED PCB, PANEL	C073	1-124-463-00	ELECT 0.1MF 20% 50V
909	*1-633-070-11	PC BOARD, VOL	C074	1-124-927-11	ELECT 4.7MF 20% 50V
910	*1-633-072-11	(EXCEPT HMK-V102)...PC BOARD, MOTOR	C075	1-161-379-00	CERAMIC 0.01MF 30% 16V
911	*1-533-189-11	HOLDER, FUSE	C076	1-126-176-11	ELECT 220MF 20% 10V
921	1-634-251-11	(TCM-YMW47C-97)...PC BOARD, TRANSLATION	C077	1-161-379-00	CERAMIC 0.01MF 30% 16V
922	*1-564-499-11	(TCM-YMW47C-97)...PIN, CONNECTOR 6P	C078	1-162-282-31	CERAMIC 100PF 10% 50V
923	*1-635-159-11	(TCM-180VW-N1)...PC BOARD, SW	C090	1-161-379-00	CERAMIC 0.01MF 30% 16V
924	*1-564-499-11	(TCM-180VW-N1)...PIN, CONNECTOR 6P	C091	1-161-379-00	CERAMIC 0.01MF 30% 16V
BP1	*1-508-829-12	(EXCEPT HMK-V102)...H TYPE BASE POST	C092	1-161-379-00	CERAMIC 0.01MF 30% 16V
C002	1-162-294-31	CERAMIC 0.001MF 10% 50V	C093	1-161-379-00	CERAMIC 0.01MF 30% 16V
C003	1-124-477-11	ELECT 47MF 20% 16V	C094	1-124-477-11	ELECT 47MF 20% 16V
	1-161-379-00	CERAMIC 0.01MF 30% 16V	C095	1-162-211-31	(EXCEPT HST-V102)
C004	1-162-215-31	CERAMIC 47PF 5% 50V		...CERAMIC 33PF 5% 50V	
C010	1-161-494-00	(EXCEPT HST-V102)	C100	1-101-005-00	CERAMIC 0.022MF 50V
	...CERAMIC 0.022MF 25V		C101	1-102-961-00	CERAMIC 27PF 5% 50V
C021	1-101-006-00	CERAMIC 0.047MF 50V	C102	1-102-961-00	CERAMIC 27PF 5% 50V
C022	1-101-006-00	(EXCEPT HST-V102)	C103	1-161-494-00	(EXCEPT HST-V102)
	...CERAMIC 0.047MF 50V			...CERAMIC 0.022MF 25V	
C023	1-161-494-00	(EXCEPT HST-V102)	C104	1-136-173-00	(EXCEPT HST-V102)
	...CERAMIC 0.022MF 25V			...FILM 0.47MF 5% 50V	
C024	1-101-006-00	CERAMIC 0.047MF 50V	C105	1-124-463-00	(EXCEPT HST-V102)
C025	1-101-006-00	(EXCEPT HST-V102)		...ELECT 0.1MF 20% 50V	
	...CERAMIC 0.047MF 50V		C106	1-124-925-11	ELECT 2.2MF 20% 50V
C026	1-101-006-00	(EXCEPT HST-V102)	C107	1-124-463-00	ELECT 0.1MF 20% 50V
	...CERAMIC 0.047MF 50V		C108	1-161-379-00	CERAMIC 0.01MF 30% 16V
C027	1-161-374-11	(EXCEPT HST-V102)	C109	1-161-379-00	CERAMIC 0.01MF 30% 16V
	...CERAMIC 0.0015MF 30% 16V		C110	1-124-477-11	ELECT 47MF 20% 16V
C028	1-102-120-00	(EXCEPT HST-V102)	C198	1-161-494-00	CERAMIC 0.022MF 25V
	...CERAMIC 0.0018MF 10% 50V				
C051	1-124-477-11	ELECT 47MF 20% 16V			
C052	1-161-379-00	CERAMIC 0.01MF 30% 16V			
C053	1-101-006-00	CERAMIC 0.047MF 50V			

Ref.No.	Part No.	Description			
C199	1-161-494-00	CERAMIC	0.022MF		25V
C201	1-124-477-11	ELECT	47MF	20%	16V
C202	1-162-294-31	(EXCEPT HMK-V102)			
	...CERAMIC		0.001MF	10%	50V
C204	1-124-791-11	ELECT	1MF	20%	50V
C212	1-161-379-00	CERAMIC	0.01MF	30%	16V
C213	1-161-379-00	CERAMIC	0.01MF	30%	16V
C221	1-125-486-11	CAP,DOUBLE LAYERS	0.22F		5.5V
C301	1-162-292-31	CERAMIC	680PF	10%	50V
C303	1-136-157-00	FILM	0.022MF	5%	50V
C304	1-126-101-11	ELECT	100MF	20%	16V
C305	1-124-925-11	ELECT	2.2MF	20%	50V
C306	1-162-292-31	CERAMIC	680PF	10%	50V
C308	1-136-157-00	FILM	0.022MF	5%	50V
C309	1-126-101-11	ELECT	100MF	20%	16V
C310	1-124-925-11	ELECT	2.2MF	20%	50V
C311	1-130-479-00	MYLAR	0.0047MF	5%	50V
C312	1-162-289-31	CERAMIC	390PF	10%	50V
C313	1-126-176-11	ELECT	220MF	20%	10V
C314	1-124-927-11	ELECT	4.7MF	20%	50V
C315	1-131-587-11	TANTALUM	0.68MF	10%	35V
C316	1-124-925-11	ELECT	2.2MF	20%	50V
C318	1-124-925-11	ELECT	2.2MF	20%	50V
C319	1-124-925-11	ELECT	2.2MF	20%	50V
C351	1-162-292-31	CERAMIC	680PF	10%	50V
C353	1-136-157-00	FILM	0.022MF	5%	50V
C354	1-126-101-11	ELECT	100MF	20%	16V
C355	1-124-925-11	ELECT	2.2MF	20%	50V
C356	1-162-292-31	CERAMIC	680PF	10%	50V
C358	1-136-157-00	FILM	0.022MF	5%	50V
C359	1-126-101-11	ELECT	100MF	20%	16V
C360	1-124-925-11	ELECT	2.2MF	20%	50V
C361	1-130-479-00	MYLAR	0.0047MF	5%	50V
C362	1-162-289-31	CERAMIC	390PF	10%	50V
C363	1-126-176-11	ELECT	220MF	20%	10V
C364	1-124-927-11	ELECT	4.7MF	20%	50V
C365	1-131-587-11	TANTALUM	0.68MF	10%	35V
C366	1-124-925-11	ELECT	2.2MF	20%	50V
C368	1-124-925-11	ELECT	2.2MF	20%	50V
C369	1-124-925-11	ELECT	2.2MF	20%	50V
C390	1-124-927-11	ELECT	4.7MF	20%	50V
C391	1-124-927-11	ELECT	4.7MF	20%	50V
C392	1-123-875-11	ELECT	10MF	20%	50V
C401	1-136-159-00	FILM	0.033MF	5%	50V
C402	1-124-925-11	ELECT	2.2MF	20%	50V
C403	1-124-925-11	ELECT	2.2MF	20%	50V
C404	1-136-153-00	FILM	0.01MF	5%	50V
C405	1-130-472-00	MYLAR	0.0012MF	5%	50V
C406	1-136-153-00	FILM	0.01MF	5%	50V
C407	1-136-273-91	FILM	75PF	5%	630V
C408	1-136-271-00	FILM	56PF	5%	630V
C409	1-162-280-31	CERAMIC	82PF	10%	50V
C410	1-162-284-31	CERAMIC	150PF	10%	50V
C451	1-136-159-00	FILM	0.033MF	5%	50V
C452	1-124-925-11	ELECT	2.2MF	20%	50V
C453	1-124-925-11	ELECT	2.2MF	20%	50V
C454	1-136-153-00	FILM	0.01MF	5%	50V
C455	1-130-472-00	MYLAR	0.0012MF	5%	50V



Ref.No.	Part No.	Description			
C456	1-136-153-00	FILM	0.01MF	5%	50V
C457	1-136-273-91	FILM	75PF	5%	630V
C458	1-136-271-00	FILM	56PF	5%	630V
C459	1-162-280-31	CERAMIC	82PF	10%	50V
C460	1-162-284-31	CERAMIC	150PF	10%	50V
C501	1-124-925-11	ELECT	2.2MF	20%	50V
C502	1-136-562-11	FILM	0.0082MF	5%	630V
C505	1-130-482-00	MYLAR	0.0082MF	5%	50V
C506	1-130-482-00	MYLAR	0.0082MF	5%	50V
C507	1-130-478-00	MYLAR	0.0039MF	5%	50V
C508	1-130-478-00	MYLAR	0.0039MF	5%	50V
C509	1-124-465-00	ELECT	0.47MF	20%	50V
C510	1-126-103-11	ELECT	470MF	20%	16V
C511	1-124-925-11	ELECT	2.2MF	20%	50V
C551	1-123-875-11	ELECT	10MF	20%	50V
C552	1-123-875-11	ELECT	10MF	20%	50V
C553	1-123-875-11	ELECT	10MF	20%	50V
C554	1-123-875-11	ELECT	10MF	20%	50V
C555	1-124-927-11	ELECT	4.7MF	20%	50V
C556	1-124-791-11	ELECT	1MF	20%	50V
C557	1-124-360-00	ELECT	1000MF	20%	16V
C601	1-124-925-11	ELECT	2.2MF	20%	50V
C602	1-162-282-31	CERAMIC	100PF	10%	50V
C603	1-162-282-31	CERAMIC	100PF	10%	50V
C604	1-124-477-11	ELECT	47MF	20%	16V
C605	1-161-377-00	CERAMIC	0.0047MF	20%	16V
C606	1-161-374-11	CERAMIC	0.0015MF	20%	16V
C607	1-124-464-11	ELECT	0.22MF	20%	50V
C608	1-124-477-11	ELECT	47MF	20%	16V
C609	1-124-925-11	ELECT	2.2MF	20%	50V
C610	1-124-477-11	ELECT	47MF	20%	16V
C651	1-124-925-11	ELECT	2.2MF	20%	50V
C652	1-162-282-31	CERAMIC	100PF	10%	50V
C653	1-162-282-31	CERAMIC	100PF	10%	50V
C654	1-124-477-11	ELECT	47MF	20%	16V
C655	1-161-377-00	CERAMIC	0.0047MF	20%	16V
C656	1-161-374-11	CERAMIC	0.0015MF	20%	16V
C657	1-124-464-11	ELECT	0.22MF	20%	50V
C658	1-124-477-11	ELECT	47MF	20%	16V
C659	1-124-925-11	ELECT	2.2MF	20%	50V
C660	1-124-477-11	ELECT	47MF	20%	16V
C701	1-124-925-11	ELECT	2.2MF	20%	50V
C702	1-124-477-11	ELECT	47MF	20%	16V
C703	1-162-282-31	CERAMIC	100PF	10%	50V
C704	1-124-925-11	ELECT	2.2MF	20%	50V
C705	1-124-464-11	ELECT	0.22MF	20%	50V
C706	1-136-161-00	FILM	0.047MF	5%	50V
C707	1-161-329-00	CERAMIC	0.0068MF	20%	16V
C708	1-161-329-00	CERAMIC	0.0068MF	20%	16V
C709	1-161-375-00	CERAMIC	0.0022MF	20%	16V
C710	1-162-294-31	CERAMIC	0.001MF	10%	50V
C711	1-161-329-00	CERAMIC	0.0068MF	20%	16V
C712	1-130-482-00	MYLAR	0.0082MF	5%	50V
C713	1-161-327-00	CERAMIC	0.0033MF	20%	16V
C714	1-102-120-00	CERAMIC	0.0018MF	10%	50V
C715	1-124-925-11	ELECT	2.2MF	20%	50V
C716	1-162-282-31	CERAMIC	100PF	10%	50V

Note: The components identified by mark  $\Delta$  or dotted line with mark  $\Delta$  are critical for safety. Replace only with part number specified.

# HMK-V82/V102 HST-V102/V202

Ref.No.	Part No.	Description			
C725	1-136-153-00	(EXCEPT HMK-V102) ...FILM 0.01MF	5%	50V	
C751	1-124-925-11	ELECT 2.2MF	20%	50V	
C752	1-124-477-11	ELECT 47MF	20%	16V	
C753	1-162-282-31	CERAMIC 100PF	10%	50V	
C754	1-124-925-11	ELECT 2.2MF	20%	50V	
C755	1-124-464-11	ELECT 0.22MF	20%	50V	
C756	1-136-161-00	FILM 0.047MF	5%	50V	
C757	1-161-329-00	CERAMIC 0.0068MF	20%	16V	
C758	1-161-329-00	CERAMIC 0.0068MF	20%	16V	
C759	1-161-375-00	CERAMIC 0.0022MF	20%	16V	
C760	1-162-294-31	CERAMIC 0.001MF	10%	50V	
C761	1-161-329-00	CERAMIC 0.0068MF	20%	16V	
C762	1-130-482-00	MYLAR 0.0082MF	5%	50V	
C763	1-161-327-00	CERAMIC 0.0033MF	20%	16V	
C764	1-102-120-00	CERAMIC 0.0018MF	10%	50V	
C765	1-124-925-11	ELECT 2.2MF	20%	50V	
C766	1-162-282-31	CERAMIC 100PF	10%	50V	
C801	1-124-925-11	ELECT 2.2MF	20%	50V	
C802	1-162-282-31	CERAMIC 100PF	10%	50V	
C803	1-162-282-31	CERAMIC 100PF	10%	50V	
C804	1-124-477-11	ELECT 47MF	20%	16V	
C805	1-123-875-11	ELECT 10MF	20%	50V	
C806	1-136-163-00	FILM 0.068MF	5%	50V	
C807	1-136-163-00	FILM 0.068MF	5%	50V	
C809	1-123-875-11	ELECT 10MF	20%	50V	
C810	1-126-101-11	ELECT 100MF	20%	16V	
C811	1-126-101-11	ELECT 100MF	20%	16V	
C851	1-124-925-11	ELECT 2.2MF	20%	50V	
C852	1-162-282-31	CERAMIC 100PF	10%	50V	
C853	1-162-282-31	CERAMIC 100PF	10%	50V	
C854	1-124-477-11	ELECT 47MF	20%	16V	
C855	1-123-875-11	ELECT 10MF	20%	50V	
C856	1-136-163-00	FILM 0.068MF	5%	50V	
C857	1-136-163-00	FILM 0.068MF	5%	50V	
C859	1-123-875-11	ELECT 10MF	20%	50V	
C901	1-102-394-11	CERAMIC 0.01MF		250V	
C902	1-126-413-11	ELECT 330MF	20%	35V	
C903	1-126-413-11	ELECT 330MF	20%	35V	
C904	1-124-477-11	ELECT 47MF	20%	16V	
C905	1-124-477-11	ELECT 47MF	20%	16V	
C906	1-124-360-00	ELECT 1000MF	20%	16V	
C907	1-124-360-00	ELECT 1000MF	20%	16V	
C908	1-124-477-11	ELECT 47MF	20%	16V	
C909	1-124-477-11	ELECT 47MF	20%	16V	
C910	1-124-473-11	ELECT 1000MF	20%	10V	
C911	1-124-473-11	ELECT 1000MF	20%	10V	
C912	1-124-925-11	ELECT 2.2MF	20%	50V	
C913	1-124-463-00	ELECT 0.1MF	20%	50V	
C914	1-126-103-11	ELECT 470MF	20%	16V	
C915	1-161-744-00	CERAMIC 0.01MF		400V	
C991	1-136-169-00	(AEP)...FILM 0.22MF	5%	50V	
C992	1-136-169-00	(AEP)...FILM 0.22MF	5%	50V	
CF001	1-567-389-11	FILTER, CERAMIC			
CF002	1-567-389-11	FILTER, CERAMIC			
CF051	1-577-075-11	OSCILLATOR, CERAMIC			

Ref.No.	Part No.	Description
CN301	*1-564-506-11	PLUG, CONNECTOR 3P
CN302	*1-564-509-11	PLUG, CONNECTOR 6P
CN501	*1-564-505-11	PLUG, CONNECTOR 2P
CN502	*1-564-340-00	PIN, CONNECTOR 6P
CN503	*1-506-988-11	PIN, CONNECTOR (PC BOARD) 6P
CN504	*1-506-986-11	PIN, CONNECTOR (PC BOARD) 4P
CN601	*1-506-990-11	PIN, CONNECTOR (PC BOARD) 8P
CN602	*1-564-508-11	(HMK-V82/V102)...PLUG, CONNECTOR 5P
CN801	*1-506-708-11	PLUG, CONNECTOR (2.5MM) 5P
CN901	*1-506-707-11	PLUG, CONNECTOR (2.5MM) 3P
CN902	*1-506-989-11	PIN, CONNECTOR (PC BOARD) 7P
CNJ601	1-569-130-11	JACK, PIN 2P
CNJ602	1-569-130-11	(HST-V102/V202)...JACK, PIN 2P
CNJ604	*1-564-358-00	(HST-V102/V202)...PIN, CONNECTOR 3P
CNJ801	1-569-113-11	JACK, LARGE TYPE
CNJ802	1-537-265-11	TERMINAL BOARD
CNJ803	1-569-130-11	(EXCEPT HST-V102)...JACK, PIN 2P (SORROUND)
CNP101	*1-506-990-11	PIN, CONNECTOR (PC BOARD) 8P
△ CNP901	1-551-478-00	(HST-V102)...CORD, POWER
△ CNP901	1-555-750-00	(AEP).....CORD, POWER
△ CNP901	1-556-035-00	(UK).....CORD, POWER
D021	8-719-912-20	(EXCEPT HST-V102)...DIODE 1SS120
D101	8-719-933-54	DIODE HZS9A2L
D201	8-719-912-20	DIODE 1SS120
D202	8-719-912-20	DIODE 1SS120
D203	8-719-912-20	DIODE 1SS120
D204	8-719-912-20	DIODE 1SS120
D206	8-719-912-20	(HST-V102)...DIODE 1SS120
D208	8-719-912-20	(HST-V102)...DIODE 1SS120
D211	8-719-912-20	DIODE 1SS120
D221	8-719-912-20	DIODE 1SS120
D222	8-719-912-20	DIODE 1SS120
D223	8-719-912-20	DIODE 1SS120
D226	8-719-301-38	DIODE SEL2210S-C
D227	8-719-301-38	DIODE SEL2210S-C
D228	8-719-301-38	DIODE SEL2210S-C
D229	8-719-301-38	DIODE SEL2210S-C
D230	8-719-312-73	DIODE SEL4814A-D
D231	8-719-312-73	DIODE SEL4814A-D
D232	8-719-312-73	DIODE SEL4814A-D
D233	8-719-312-73	DIODE SEL4814A-D
D234	8-719-312-73	DIODE SEL4814A-D
D235	8-719-312-73	DIODE SEL4814A-D
D236	8-719-312-73	DIODE SEL4814A-D
D237	8-719-312-73	DIODE SEL4814A-D
D238	8-719-312-73	DIODE SEL4814A-D
D239	8-719-312-73	DIODE SEL4814A-D
D240	8-719-301-38	(EXCEPT HMK-V102)...DIODE SEL2210S-C
D501	8-719-912-20	DIODE 1SS120
D502	8-719-912-20	DIODE 1SS120
D503	8-719-912-20	DIODE 1SS120
D551	8-719-912-20	DIODE 1SS120
D552	8-719-912-20	DIODE 1SS120
D553	8-719-912-20	DIODE 1SS120

Note: The components identified by mark  or dotted line with mark  are critical for safety. Replace only with part number specified.

Ref.No.	Part No.	Description
D554	8-719-912-20	DIODE 1SS120
D555	8-719-912-20	DIODE 1SS120
D556	8-719-912-20	DIODE 1SS120
D557	8-719-912-20	DIODE 1SS120
D558	8-719-912-20	DIODE 1SS120
D559	8-719-912-20	DIODE 1SS120
D560	8-719-912-20	DIODE 1SS120
D561	8-719-912-20	DIODE 1SS120
D562	8-719-912-20	DIODE 1SS120
D563	8-719-912-20	DIODE 1SS120
D564	8-719-912-20	DIODE 1SS120
D565	8-719-912-20	DIODE 1SS120
D566	8-719-912-20	DIODE 1SS120
D567	8-719-912-20	DIODE 1SS120
D596	8-719-301-38	DIODE SEL2210S-C
D597	8-719-301-44	DIODE SEL2410E-C
D598	8-719-301-52	DIODE SEL2810A-C
D801	8-719-912-20	DIODE 1SS120
D802	8-719-912-20	DIODE 1SS120
D901	△.8-719-312-09	DIODE RBA-402
D902	8-719-001-67	DIODE UZL-12L3
D903	8-719-001-67	DIODE UZL-12L3
D904	8-719-933-50	DIODE HZS7C2L
D905	8-719-933-50	DIODE HZS7C2L
F901	△.1-532-237-00	(AEP,UK)...FUSE, TIME LAG (3.15A)
F901	△.1-576-107-11	(HST-V102)...FUSE (3.15A)
F902	△.1-576-107-11	(HST-V102)...FUSE (3.15A)
F902	△.1-532-237-00	(AEP,UK)...FUSE, TIME LAG (3.15A)
F903	△.1-532-775-11	(HST-V102)...FUSE, MICRO(SECONDARY)800mA
F904	△.1-532-775-11	(HST-V102)...FUSE, MICRO(SECONDARY)800mA
FE001	1-465-006-11	FRONT END (FM) (2 GANG)
FE021	1-236-461-11	(HST-V102)...ENCAPSULATED COMPONENT
FE021	1-236-462-11	(EXCEPT HST-V102)...ENCAPSULATED COMPONENT
FE022	1-236-463-11	(EXCEPT HST-V102)...ENCAPSULATED COMPONENT
HE101	1-543-673-11	(DECK B)...HEAD, MAGNETIC (ERASE)
HP101	1-543-672-11	(DECK A)...HEAD, MAGNETIC (REC/PB)
HRP101	1-543-672-11	(DECK B)...HEAD, MAGNETIC (REC/PB)
IC051	8-759-822-14	IC LA1851N-S
IC101	8-759-820-91	IC LC7218
IC201	8-759-148-93	IC UPD75308GF-491-389
IC202	8-749-920-83	(EXCEPT HMK-V102)...IC GP1U52XB
IC301	8-759-111-44	IC UPC4570C-1
IC302	8-759-111-44	IC UPC4570C-1
IC303	8-759-000-49	IC MC14066BCP
IC304	8-752-031-67	IC CXA1100P
IC401	8-759-601-02	IC M5218P
IC501	8-759-140-11	IC TC4011BP
IC502	8-759-240-01	IC TC4001BP
IC601	8-759-601-02	IC M5218P
IC602	8-759-208-08	IC TC4052BPHB
IC701	8-759-601-02	IC M5218P
IC702	8-759-601-02	IC M5218P
IC703	8-759-820-62	(EXCEPT HMK-V102)...IC LB1639

Ref.No.	Part No.	Description
IC801	8-749-920-78	IC SI-18751
IC851	8-749-920-78	IC SI-18751
IC901	8-759-820-13	IC L78MR06
△ ICP901.1	1-532-838-11	(EXCEPT HST-V102)...LINK, IC
△ ICP902.1	1-532-838-11	(EXCEPT HST-V102)...LINK, IC
IFT071	1-404-713-11	TRANSFORMER, IF
L021	1-410-524-41	(EXCEPT HST-V102)...INDUCTOR 220UH
L071	1-407-500-00	(EXCEPT HST-V102)...INDUCTOR 4.7MMH
L071	1-410-686-11	(HST-V102)...INDUCTOR 1MMH
L401	1-410-775-21	INDUCTOR 10MMH
L402	1-410-780-11	INDUCTOR 27MMH
L451	1-410-775-21	INDUCTOR 10MMH
L452	1-410-780-11	INDUCTOR 27MMH
L501	1-410-524-41	INDUCTOR 220UH
LCD201	1-808-810-11	DISPLAY PANEL, LIQUID CRYSTAL
LPF061	1-235-164-00	FILTER, LOW PASS
LPF066	1-235-164-00	FILTER, LOW PASS
M3	4-895-034-01	MOTOR ASSY (PLAYER)
M101	X-3358-201-1	(TCM-180VW-N1)...MOTOR (W) ASSY
M101	X-3390-803-1	(TCM-YMW47C-97)...MOTOR ASSY
Q001	8-729-620-19	TRANSISTOR 2SC2724-CD
Q021	8-729-900-80	(EXCEPT HST-V102)...TRANSISTOR DTC114ES
Q022	8-729-900-80	(EXCEPT HST-V102)...TRANSISTOR DTC114ES
Q023	8-729-900-80	(EXCEPT HST-V102)...TRANSISTOR DTC114ES
Q024	8-729-821-04	(EXCEPT HST-V102)...TRANSISTOR 2SA1317-STU
Q025	8-729-620-05	(EXCEPT HST-V102)...TRANSISTOR 2SC2603-EF
Q026	8-729-900-80	(EXCEPT HST-V102)...TRANSISTOR DTC114ES
Q061	8-729-620-05	TRANSISTOR 2SC2603-EF
Q066	8-729-620-05	TRANSISTOR 2SC2603-EF
Q091	8-729-900-61	TRANSISTOR DTA114ES
Q092	8-729-900-80	TRANSISTOR DTC114ES
Q101	8-729-202-67	(EXCEPT HST-V102)...TRANSISTOR 2SK246GR3
Q102	8-729-201-84	(EXCEPT HST-V102)...TRANSISTOR 2SC31
Q103	8-729-202-67	TRANSISTOR 2SK246GR3
Q104	8-729-201-84	TRANSISTOR 2SC3112B
Q105	8-729-620-05	TRANSISTOR 2SC2603-EF
Q201	8-729-900-61	(EXCEPT HMK-V102)...TRANSISTOR DTA114ES
Q202	8-729-620-05	TRANSISTOR 2SC2603-EF
Q203	8-729-900-36	TRANSISTOR DTC124ES
Q281	8-729-900-89	TRANSISTOR DTC144ES
Q282	8-729-821-04	TRANSISTOR 2SA1317-STU
Q301	8-729-900-89	TRANSISTOR DTC144ES
Q302	8-729-620-05	TRANSISTOR 2SC2603-EF
Q303	8-729-620-05	TRANSISTOR 2SC2603-EF
Q351	8-729-900-89	TRANSISTOR DTC144ES
Q352	8-729-620-05	TRANSISTOR 2SC2603-EF
Q353	8-729-620-05	TRANSISTOR 2SC2603-EF
Q401	8-729-900-89	TRANSISTOR DTC144ES
Q451	8-729-900-89	TRANSISTOR DTC144ES
Q501	8-729-900-61	TRANSISTOR DTA114ES
Q502	8-729-281-52	TRANSISTOR 2SC1815Y
Q503	8-729-194-57	TRANSISTOR 2SC945P
Q504	8-729-194-57	TRANSISTOR 2SC945P

**Note:** The components identified by mark △ or dotted line with mark △ are critical for safety. Replace only with part number specified.

Ref.No.	Part No.	Description
Q505	8-729-620-05	TRANSISTOR 2SC2603-EF
Q551	8-729-620-05	TRANSISTOR 2SC2603-EF
Q552	8-729-900-89	TRANSISTOR DTC144ES
Q553	8-729-900-63	TRANSISTOR DTA124ES
Q554	8-729-620-05	TRANSISTOR 2SC2603-EF
Q555	8-729-821-04	TRANSISTOR 2SA1317-STU
Q701	8-729-620-05	TRANSISTOR 2SC2603-EF
Q702	8-729-141-26	TRANSISTOR 2SC3622A-LK
Q751	8-729-620-05	TRANSISTOR 2SC2603-EF
Q752	8-729-141-26	TRANSISTOR 2SC3622A-LK
Q801	8-729-620-05	TRANSISTOR 2SC2603-EF
Q802	8-729-620-05	TRANSISTOR 2SC2603-EF
Q803	8-729-620-05	TRANSISTOR 2SC2603-EF
Q804	8-729-620-05	TRANSISTOR 2SC2603-EF
Q901	8-729-920-98	TRANSISTOR 2SD1761-EF
Q902	8-729-920-97	TRANSISTOR 2SB1187-EF
Q903	8-729-920-98	TRANSISTOR 2SD1761-EF
Q904	8-729-920-97	TRANSISTOR 2SB1187-EF
R07	1-249-412-11	(EXCEPT HST-V102) ...CARBON 390 5% 1/4W
R09	1-249-412-11	(HST-V102)...CARBON 390 5% 1/4W
R99	1-249-397-11	(HST-V102)...CARBON 22 5% 1/4W
R001	1-249-409-11	CARBON 220 5% 1/4W
R002	1-247-891-00	CARBON 330K 5% 1/4W
R003	1-249-411-11	CARBON 330 5% 1/4W
R010	1-249-401-11	CARBON 47 5% 1/4W F
R021	1-249-441-11	CARBON 100K 5% 1/4W
R022	1-249-425-11	(EXCEPT HST-V102) ...CARBON 4.7K 5% 1/4W
R023	1-249-429-11	(EXCEPT HST-V102) ...CARBON 10K 5% 1/4W
R024	1-249-429-11	(EXCEPT HST-V102) ...CARBON 10K 5% 1/4W
R025	1-249-434-11	(EXCEPT HST-V102) ...CARBON 27K 5% 1/4W
R026	1-249-433-11	(EXCEPT HST-V102) ...CARBON 22K 5% 1/4W
R027	1-249-413-11	(EXCEPT HST-V102) ...CARBON 470 5% 1/4W
R028	1-249-421-11	(EXCEPT HST-V102) ...CARBON 2.2K 5% 1/4W
R029	1-249-433-11	(EXCEPT HST-V102) ...CARBON 22K 5% 1/4W
R030	1-249-437-11	CARBON 47K 5% 1/4W
R031	1-249-441-11	(EXCEPT HST-V102) ...CARBON 100K 5% 1/4W
R032	1-249-437-11	(EXCEPT HST-V102) ...CARBON 47K 5% 1/4W
R033	1-247-903-00	(EXCEPT HST-V102) ...CARBON 1M 5% 1/4W
R034	1-249-433-11	(EXCEPT HST-V102) ...CARBON 22K 5% 1/4W
R051	1-249-417-11	CARBON 1K 5% 1/4W
R052	1-249-433-11	(EXCEPT HST-V102) ...CARBON 22K 5% 1/4W
R052	1-249-428-11	(HST-V102)...CARBON 8.2K 5% 1/4W

Ref.No.	Part No.	Description
R053	1-249-405-11	CARBON 100 5% 1/4W F
R054	1-249-435-11	CARBON 33K 5% 1/4W
R055	1-249-428-11	CARBON 8.2K 5% 1/4W
R056	1-249-432-11	CARBON 18K 5% 1/4W
R057	1-249-429-11	CARBON 10K 5% 1/4W
R058	1-249-418-11	CARBON 1.2K 5% 1/4W
R060	1-249-425-11	(EXCEPT HST-V102) ...CARBON 4.7K 5% 1/4W
R060	1-247-848-11	(HST-V102)...CARBON 5.1K 5% 1/4W
R061	1-247-895-00	CARBON 470K 5% 1/4W
R062	1-249-416-11	(EXCEPT HST-V102) ...CARBON 820 5% 1/4W
R062	1-249-418-11	(HST-V102)...CARBON 1.2K 5% 1/4W
R063	1-249-421-11	CARBON 2.2K 5% 1/4W
R064	1-249-423-11	CARBON 3.3K 5% 1/4W
R065	1-249-425-11	(EXCEPT HST-V102) ...CARBON 4.7K 5% 1/4W
R065	1-247-848-11	(HST-V102)...CARBON 5.1K 5% 1/4W
R066	1-247-895-00	CARBON 470K 5% 1/4W
R067	1-249-416-11	(EXCEPT HST-V102) ...CARBON 820 5% 1/4W
R067	1-249-418-11	(HST-V102)...CARBON 1.2K 5% 1/4W
R068	1-249-421-11	CARBON 2.2K 5% 1/4W
R069	1-249-423-11	CARBON 3.3K 5% 1/4W
R070	1-249-437-11	CARBON 47K 5% 1/4W
R072	1-249-437-11	CARBON 47K 5% 1/4W
R090	1-249-429-11	CARBON 10K 5% 1/4W
R091	1-249-429-11	CARBON 10K 5% 1/4W
R092	1-249-425-11	CARBON 4.7K 5% 1/4W
R093	1-249-417-11	CARBON 1K 5% 1/4W
R094	1-249-417-11	CARBON 1K 5% 1/4W
R095	1-249-429-11	CARBON 10K 5% 1/4W
R096	1-249-429-11	CARBON 10K 5% 1/4W
R097	1-249-401-11	CARBON 47 5% 1/4W F
R098	1-249-423-11	CARBON 3.3K 5% 1/4W
R101	1-249-405-11	CARBON 100 5% 1/4W F
R102	1-249-423-11	(EXCEPT HST-V102) ...CARBON 3.3K 5% 1/4W
R103	1-249-421-11	(EXCEPT HST-V102) ...CARBON 2.2K 5% 1/4W
R104	1-249-433-11	(EXCEPT HST-V102) ...CARBON 22K 5% 1/4W
R105	1-249-425-11	(EXCEPT HST-V102) ...CARBON 4.7K 5% 1/4W
R106	1-249-414-11	(EXCEPT HST-V102) ...CARBON 560 5% 1/4W
R107	1-249-417-11	(EXCEPT HST-V102) ...CARBON 1K 5% 1/4W
R108	1-249-410-11	(EXCEPT HST-V102) ...CARBON 270 5% 1/4W
R109	1-249-405-11	(EXCEPT HST-V102) ...CARBON 100 5% 1/4W
R110	1-249-423-11	CARBON 3.3K 5% 1/4W
R111	1-249-425-11	CARBON 4.7K 5% 1/4W
R112	1-249-421-11	CARBON 2.2K 5% 1/4W
R113	1-249-425-11	CARBON 4.7K 5% 1/4W
R114	1-249-425-11	CARBON 4.7K 5% 1/4W
R115	1-249-414-11	CARBON 560 5% 1/4W

**Note:** The components identified by mark  $\Delta$  or dotted line with mark  $\Delta$  are critical for safety. Replace only with part number specified.

Ref.No.	Part No.	Description				
R116	1-249-417-11	CARBON	1K	5%	1/4W	
R117	1-249-410-11	CARBON	270	5%	1/4W	
R118	1-249-405-11	CARBON	100	5%	1/4W	
R121	1-249-417-11	CARBON	1K	5%	1/4W	
R122	1-249-417-11	CARBON	1K	5%	1/4W	
R123	1-249-417-11	CARBON	1K	5%	1/4W	
R124	1-249-417-11	CARBON	1K	5%	1/4W	
R125	1-249-417-11	CARBON	1K	5%	1/4W	
R126	1-249-441-11	CARBON	100K	5%	1/4W	
R127	1-249-429-11	CARBON	10K	5%	1/4W	
R201	1-249-412-11	(EXCEPT HMK-V102) ...CARBON	390	5%	1/4W	
R203	1-249-417-11	CARBON	1K	5%	1/4W	
R204	1-249-417-11	CARBON	1K	5%	1/4W	
R206	1-249-433-11	CARBON	22K	5%	1/4W	
R207	1-249-417-11	CARBON	1K	5%	1/4W	
R208	1-249-417-11	CARBON	1K	5%	1/4W	
R209	1-249-437-11	CARBON	47K	5%	1/4W	
R210	1-249-437-11	CARBON	47K	5%	1/4W	
R211	1-249-437-11	CARBON	47K	5%	1/4W	
R212	1-249-437-11	CARBON	47K	5%	1/4W	
R213	1-249-412-11	CARBON	390	5%	1/4W	
R214	1-249-412-11	CARBON	390	5%	1/4W	
R215	1-249-412-11	CARBON	390	5%	1/4W	
R216	1-249-412-11	CARBON	390	5%	1/4W	
R218	1-249-437-11	CARBON	47K	5%	1/4W	
R219	1-249-437-11	CARBON	47K	5%	1/4W	
R220	1-249-431-11	CARBON	15K	5%	1/4W	
R222	1-249-417-11	CARBON	1K	5%	1/4W	
R223	1-249-417-11	CARBON	1K	5%	1/4W	
R224	1-249-437-11	CARBON	47K	5%	1/4W	
R226	1-249-417-11	CARBON	1K	5%	1/4W	
R227	1-249-437-11	CARBON	47K	5%	1/4W	
R230	1-249-408-11	CARBON	180	5%	1/4W	
R231	1-249-408-11	CARBON	180	5%	1/4W	
R281	1-249-433-11	CARBON	22K	5%	1/4W	
R282	1-249-433-11	CARBON	22K	5%	1/4W	
R292	1-249-417-11	CARBON	1K	5%	1/4W	
R301	1-247-889-00	CARBON	270K	5%	1/4W	
R302	1-249-404-00	CARBON	82	5%	1/4W	
R303	1-247-882-11	CARBON	130K	5%	1/4W	
R304	1-249-426-11	CARBON	5.6K	5%	1/4W	
R305	1-249-409-11	CARBON	220	5%	1/4W	
R306	1-247-889-00	CARBON	270K	5%	1/4W	
R307	1-249-404-00	CARBON	82	5%	1/4W	
R308	1-247-882-11	CARBON	130K	5%	1/4W	
R309	1-249-426-11	CARBON	5.6K	5%	1/4W	
R310	1-249-409-11	CARBON	220	5%	1/4W	
R311	1-249-430-11	CARBON	12K	5%	1/4W	
R312	1-249-431-11	CARBON	15K	5%	1/4W	
R313	1-247-889-00	CARBON	270K	5%	1/4W	
R314	1-249-401-11	CARBON	47	5%	1/4W	
R315	1-249-401-11	CARBON	47	5%	1/4W	
R316	1-249-437-11	CARBON	47K	5%	1/4W	
R317	1-247-838-00	CARBON	2K	5%	1/4W	
R318	1-249-421-11	CARBON	2.2K	5%	1/4W	
R319	1-249-425-11	CARBON	4.7K	5%	1/4W	

Ref.No.	Part No.	Description				
R320	1-249-429-11	CARBON	10K	5%	1/4W	
R321	1-249-417-11	CARBON	1K	5%	1/4W	
R322	1-249-429-11	CARBON	10K	5%	1/4W	
R323	1-249-429-11	CARBON	10K	5%	1/4W	
R324	1-249-422-11	CARBON	2.7K	5%	1/4W	
R325	1-249-425-11	CARBON	4.7K	5%	1/4W	
R326	1-249-441-11	CARBON	100K	5%	1/4W	
R327	1-249-441-11	CARBON	100K	5%	1/4W	
R351	1-247-889-00	CARBON	270K	5%	1/4W	
R352	1-249-404-00	CARBON	82	5%	1/4W	
R353	1-247-882-11	CARBON	130K	5%	1/4W	
R354	1-249-426-11	CARBON	5.6K	5%	1/4W	
R355	1-249-409-11	CARBON	220	5%	1/4W	
R356	1-247-889-00	CARBON	270K	5%	1/4W	
R357	1-249-404-00	CARBON	82	5%	1/4W	
R358	1-247-882-11	CARBON	130K	5%	1/4W	
R359	1-249-426-11	CARBON	5.6K	5%	1/4W	
R360	1-249-409-11	CARBON	220	5%	1/4W	
R361	1-249-430-11	CARBON	12K	5%	1/4W	
R362	1-249-431-11	CARBON	15K	5%	1/4W	
R363	1-247-889-00	CARBON	270K	5%	1/4W	
R364	1-249-401-11	CARBON	47	5%	1/4W	
R365	1-249-401-11	CARBON	47	5%	1/4W	
R366	1-249-437-11	CARBON	47K	5%	1/4W	
R367	1-247-838-00	CARBON	2K	5%	1/4W	
R368	1-249-421-11	CARBON	2.2K	5%	1/4W	
R369	1-249-425-11	CARBON	4.7K	5%	1/4W	
R370	1-249-429-11	CARBON	10K	5%	1/4W	
R371	1-249-417-11	CARBON	1K	5%	1/4W	
R372	1-249-429-11	CARBON	10K	5%	1/4W	
R373	1-249-429-11	CARBON	10K	5%	1/4W	
R374	1-249-422-11	CARBON	2.7K	5%	1/4W	
R375	1-249-425-11	CARBON	4.7K	5%	1/4W	
R376	1-249-441-11	CARBON	100K	5%	1/4W	
R377	1-249-441-11	CARBON	100K	5%	1/4W	
R390	1-249-417-11	CARBON	1K	5%	1/4W	
R391	1-215-460-00	METAL	43K	1%	1/6W	
R392	1-249-437-11	CARBON	47K	5%	1/4W	
R393	1-249-417-11	CARBON	1K	5%	1/4W	
R401	1-249-435-11	CARBON	33K	5%	1/4W	
R402	1-247-876-11	CARBON	75K	5%	1/4W	
R403	1-249-422-11	CARBON	2.7K	5%	1/4W	
R404	1-249-410-11	CARBON	270	5%	1/4W	
R405	1-249-423-11	CARBON	3.3K	5%	1/4W	
R406	1-247-850-11	CARBON	6.2K	5%	1/4W	
R407	1-249-430-11	CARBON	12K	5%	1/4W	
R451	1-249-435-11	CARBON	33K	5%	1/4W	
R452	1-247-876-11	CARBON	75K	5%	1/4W	
R453	1-249-422-11	CARBON	2.7K	5%	1/4W	
R454	1-249-410-11	CARBON	270	5%	1/4W	
R455	1-249-423-11	CARBON	3.3K	5%	1/4W	
R456	1-247-850-11	CARBON	6.2K	5%	1/4W	
R457	1-249-430-11	CARBON	12K	5%	1/4W	
R501	1-249-401-11	CARBON	47	5%	1/4W	
R502	1-249-429-11	CARBON	10K	5%	1/4W	
R503	1-249-429-11	CARBON	10K	5%	1/4W	
R504	1-249-425-11	CARBON	4.7K	5%	1/4W	

Ref.No.	Part No.	Description			
R505	1-212-857-00	FUSIBLE	10	5%	1/4W F
R506	1-249-434-11	CARBON	27K	5%	1/4W
R507	1-249-434-11	CARBON	27K	5%	1/4W
R508	1-249-429-11	CARBON	10K	5%	1/4W
R509	1-249-417-11	CARBON	1K	5%	1/4W
R551	1-247-850-11	CARBON	6.2K	5%	1/4W
R552	1-249-440-11	CARBON	82K	5%	1/4W
R553	1-249-433-11	CARBON	22K	5%	1/4W
R554	1-249-429-11	CARBON	10K	5%	1/4W
R555	1-249-437-11	CARBON	47K	5%	1/4W
R556	1-249-409-11	CARBON	220	5%	1/4W
R557	1-249-437-11	CARBON	47K	5%	1/4W
R558	1-249-429-11	CARBON	10K	5%	1/4W
R559	1-249-437-11	CARBON	47K	5%	1/4W
R560	1-249-423-11	CARBON	3.3K	5%	1/4W
R561	1-249-441-11	CARBON	100K	5%	1/4W
R562	1-249-433-11	CARBON	22K	5%	1/4W
R563	1-249-429-11	CARBON	10K	5%	1/4W
R564	1-249-437-11	CARBON	47K	5%	1/4W
R565	1-249-433-11	CARBON	22K	5%	1/4W
R566	1-249-433-11	CARBON	22K	5%	1/4W
R568	1-249-429-11	CARBON	10K	5%	1/4W
R569	1-249-425-11	CARBON	4.7K	5%	1/4W
R570	1-249-429-11	CARBON	10K	5%	1/4W
R591	1-247-850-11	CARBON	6.2K	5%	1/4W
R592	1-249-416-11	CARBON	820	5%	1/4W
R596	1-249-413-11	CARBON	470	5%	1/4W
R597	1-249-413-11	CARBON	470	5%	1/4W
R598	1-249-413-11	CARBON	470	5%	1/4W
R601	1-249-417-11	CARBON	1K	5%	1/4W
R602	1-249-441-11	CARBON	100K	5%	1/4W
R603	1-249-416-11	CARBON	820	5%	1/4W
R604	1-247-897-11	CARBON	560K	5%	1/4W
R605	1-249-437-11	CARBON	47K	5%	1/4W
R606	1-249-409-11	CARBON	220	5%	1/4W
R607	1-249-441-11	CARBON	100K	5%	1/4W
R608	1-249-409-11	CARBON	220	5%	1/4W
R610	1-249-429-11	CARBON	10K	5%	1/4W
R611	1-249-441-11	CARBON	100K	5%	1/4W
R612	1-249-417-11	CARBON	1K	5%	1/4W
R613	1-249-417-11	CARBON	1K	5%	1/4W
R614	1-249-433-11	CARBON	22K	5%	1/4W
R615	1-249-433-11	CARBON	22K	5%	1/4W
R651	1-249-417-11	CARBON	1K	5%	1/4W
R652	1-249-441-11	CARBON	100K	5%	1/4W
R653	1-249-416-11	CARBON	820	5%	1/4W
R654	1-247-897-11	CARBON	560K	5%	1/4W
R655	1-249-437-11	CARBON	47K	5%	1/4W
R656	1-249-409-11	CARBON	220	5%	1/4W
R657	1-249-441-11	CARBON	100K	5%	1/4W
R658	1-249-409-11	CARBON	220	5%	1/4W
R660	1-249-429-11	CARBON	10K	5%	1/4W
R661	1-249-441-11	CARBON	100K	5%	1/4W
R701	1-249-441-11	CARBON	100K	5%	1/4W
R702	1-249-417-11	CARBON	1K	5%	1/4W
R703	1-249-431-11	CARBON	15K	5%	1/4W
R704	1-249-441-11	CARBON	100K	5%	1/4W

Ref.No.	Part No.	Description			
R705	1-249-433-11	CARBON	22K	5%	1/4W
R706	1-249-424-11	CARBON	3.9K	5%	1/4W
R707	1-249-441-11	CARBON	100K	5%	1/4W
R708	1-249-427-11	CARBON	6.8K	5%	1/4W
R709	1-249-412-11	CARBON	390	5%	1/4W
R710	1-249-436-11	CARBON	39K	5%	1/4W
R711	1-247-897-11	CARBON	560K	5%	1/4W
R712	1-249-438-11	CARBON	56K	5%	1/4W
R713	1-249-436-11	CARBON	39K	5%	1/4W
R714	1-249-434-11	CARBON	27K	5%	1/4W
R715	1-249-434-11	CARBON	27K	5%	1/4W
R716	1-249-432-11	CARBON	18K	5%	1/4W
R717	1-249-432-11	CARBON	18K	5%	1/4W
R718	1-249-430-11	CARBON	12K	5%	1/4W
R719	1-249-430-11	CARBON	12K	5%	1/4W
R720	1-249-428-11	CARBON	8.2K	5%	1/4W
R721	1-249-428-11	CARBON	8.2K	5%	1/4W
R722	1-247-897-11	CARBON	560K	5%	1/4W
R723	1-249-421-11	CARBON	2.2K	5%	1/4W
R724	1-249-425-11	CARBON	4.7K	5%	1/4W
R725	1-249-433-11	CARBON	22K	5%	1/4W
R726	1-249-433-11	CARBON	22K	5%	1/4W
R727	1-249-433-11	CARBON	22K	5%	1/4W
R751	1-249-441-11	CARBON	100K	5%	1/4W
R752	1-249-417-11	CARBON	1K	5%	1/4W
R754	1-249-441-11	CARBON	100K	5%	1/4W
R755	1-249-433-11	CARBON	22K	5%	1/4W
R756	1-249-424-11	CARBON	3.9K	5%	1/4W
R757	1-249-441-11	CARBON	100K	5%	1/4W
R758	1-249-427-11	CARBON	6.8K	5%	1/4W
R759	1-249-412-11	CARBON	390	5%	1/4W
R760	1-249-436-11	CARBON	39K	5%	1/4W
R761	1-247-897-11	CARBON	560K	5%	1/4W
R762	1-249-438-11	CARBON	56K	5%	1/4W
R763	1-249-436-11	CARBON	39K	5%	1/4W
R764	1-249-434-11	CARBON	27K	5%	1/4W
R765	1-249-434-11	CARBON	27K	5%	1/4W
R766	1-249-432-11	CARBON	18K	5%	1/4W
R767	1-249-432-11	CARBON	18K	5%	1/4W
R768	1-249-430-11	CARBON	12K	5%	1/4W
R769	1-249-430-11	CARBON	12K	5%	1/4W
R770	1-249-428-11	CARBON	8.2K	5%	1/4W
R771	1-249-428-11	CARBON	8.2K	5%	1/4W
R772	1-247-897-11	CARBON	560K	5%	1/4W
R773	1-249-421-11	CARBON	2.2K	5%	1/4W
R774	1-249-425-11	CARBON	4.7K	5%	1/4W
R801	1-249-417-11	CARBON	1K	5%	1/4W
R802	1-249-434-11	CARBON	27K	5%	1/4W
R803	1-249-414-11	CARBON	560	5%	1/4W
R804	1-249-434-11	CARBON	27K	5%	1/4W
R805	1-249-389-11	CARBON	4.7	5%	1/4W
R806	1-249-415-11	CARBON	680	5%	1/4W
R807	1-249-415-11	CARBON	680	5%	1/4W
R810	1-249-441-11	CARBON	100K	5%	1/4W
R811	1-249-389-11	CARBON	4.7	5%	1/4W
R812	1-249-438-11	CARBON	56K	5%	1/4W
R813	1-249-438-11	CARBON	56K	5%	1/4W

Note: The components identified by mark **A** or dotted line with mark **A** are critical for safety. Replace only with part number specified.

Ref.No.	Part No.	Description
R851	1-249-417-11	CARBON 1K 5% 1/4W
R852	1-249-434-11	CARBON 27K 5% 1/4W
R853	1-249-414-11	CARBON 560 5% 1/4W
R854	1-249-434-11	CARBON 27K 5% 1/4W
R855	1-249-389-11	CARBON 4.7 5% 1/4W
R856	1-249-415-11	CARBON 680 5% 1/4W
R857	1-249-415-11	CARBON 680 5% 1/4W
R863	1-249-437-11	CARBON 47K 5% 1/4W
R901	1-249-422-11	CARBON 2.7K 5% 1/4W
R902	1-249-422-11	CARBON 2.7K 5% 1/4W
R903	1-249-419-11	CARBON 1.5K 5% 1/4W
R904	1-249-419-11	CARBON 1.5K 5% 1/4W
R910	1-202-725-00	(HST-V102)...SOLID 3.3M 10% 1/2W
RV071	1-238-601-11	RES, ADJ, CARBON, 22K (AM TUNED)
RV072	1-238-601-11	RES, ADJ, CARBON, 22K (FM TUNED)
RV301	1-238-600-11	RES, ADJ, CARBON 10K (PB LEVEL A,L)
RV302	1-238-600-11	RES, ADJ, CARBON 10K (PB LEVEL B,L)
RV303	1-238-600-11	RES, ADJ, CARBON 10K (REC LEVEL L)
RV351	1-238-600-11	RES, ADJ, CARBON 10K (PB LEVEL A,R)
RV352	1-238-600-11	RES, ADJ, CARBON 10K (PB LEVEL B,R)
RV353	1-238-600-11	RES, ADJ, CARBON 10K (REC LEVEL R)
RV401	1-238-603-11	RES, ADJ, CARBON 100K (BIAS CURRENT L)
RV451	1-238-603-11	RES, ADJ, CARBON 100K (BIAS CURRENT R)
RV701	1-238-830-21	RES, VAR, CARBON 100K/100K (SURROUND)
RV702	1-238-830-21	RES, VAR, CARBON 100K/100K (DBFB)
RV703	1-238-831-21	RES, VAR, SLIDE 250K/250K (100Hz)
RV704	1-238-831-21	RES, VAR, SLIDE 250K/250K (330Hz)
RV705	1-238-831-21	RES, VAR, SLIDE 250K/250K (1kHz)
RV706	1-238-831-21	RES, VAR, SLIDE 250K/250K (3.3kHz)
RV707	1-238-831-21	RES, VAR, SLIDE 250K/250K (10kHz)
RV708	1-238-829-21	(HMK-V102)
RV708	1-238-875-21	...RES, VAR, CARBON 100K/100K (VOLUME) (EXCEPT HMK-V102) ...RES, VAR, CARBON 100K/100K (VOLUME)
RY501	1-515-614-11	RELAY
RY801	1-515-533-11	RELAY
S101	1-570-715-11	(TCM-YMW47C-97)...SWITCH, LEAF
S102	1-570-430-11	(TCM-YMW47C-97)...SWITCH, LEAF
S102	1-571-736-11	(TCM-180VW-N1)...SWITCH, LEAF
S103	1-571-736-11	(TCM-180VW-N1)...SWITCH, LEAF
S103	1-572-040-11	(TCM-YMW47C-97)...SWITCH, LEAF
S104	1-570-715-11	(TCM-YMW47C-97)...SWITCH, LEAF
S105	1-570-430-11	(TCM-YMW47C-97)...SWITCH, LEAF
S105	1-571-736-11	(TCM-180VW-N1)...SWITCH, LEAF
S106	4-895-068-01	(HMK-V82/V102)...LIEF, SW (PLAYER)
S201	1-554-303-21	SWITCH, KEY BOARD (+)
S202	1-554-303-21	SWITCH, KEY BOARD (SHIFT)
S203	1-554-303-21	SWITCH, KEY BOARD (MEMORY)
S204	1-554-303-21	SWITCH, KEY BOARD (TUNER)
S205	1-554-303-21	SWITCH, KEY BOARD (-)
S206	1-554-303-21	SWITCH, KEY BOARD (1)
S207	1-554-303-21	SWITCH, KEY BOARD (2)
S208	1-554-303-21	SWITCH, KEY BOARD (CD)
S209	1-554-303-21	SWITCH, KEY BOARD (BAND SELECTOR)
S210	1-554-303-21	SWITCH, KEY BOARD (3)
S211	1-554-303-21	SWITCH, KEY BOARD (4)

Ref.No.	Part No.	Description
S212	1-554-303-21	SWITCH, KEY BOARD (TAPE)
S214	1-554-303-21	SWITCH, KEY BOARD (5)
S215	1-554-303-21	SWITCH, KEY BOARD (6)
S216	1-554-303-21	SWITCH, KEY BOARD (PHONO)
S501	1-572-149-21	SWITCH, PUSH (2 KEY)
S901	Δ 1-572-109-11	SWITCH, PUSH (AC POWER)(1 KEY)
T051	1-404-807-11	TRANSFORMER, DISCRIMINATOR
T501	1-433-349-11	TRANSFORMER, BIAS OSCILLATION
T901	Δ 1-449-873-21	(EXCEPT HST-V102)...TRANSFORMER, POWER
T901	Δ 1-450-046-21	(HST-V102).....TRANSFORMER, POWER
TB001	1-537-264-11	TERMINAL BOARD (ANTENNA)
TN1	Δ 1-535-476-11	TERMINAL
TN2	Δ 1-535-476-11	TERMINAL
TP1	*1-560-061-00	PIN, CONNECTOR 3P (L,R)
TP2	*1-560-060-00	PIN, CONNECTOR 2P (NULL)
X201	1-567-775-11	VIBRATOR, CERAMIC (4.19MHz)
XT101	1-577-126-11	VIBRATOR, CRYSTAL (7.2MHz)

#### ACCESSORY & PACKING MATERIAL

1-465-358-11	(HST-V102/V202)...COMMANDER, REMOTE (RM-S130)
1-501-374-11	ANTENNA, LOOP
2-181-754-01	(HST-V102/V202)...COVER, BATTERY
3-751-030-11	(HMK-V82).....MANUAL, INSTRUCTION
3-751-030-61	(HMK-V82).....MANUAL, INSTRUCTION
3-751-142-11	(HMK-V102:AEP)...MANUAL, INSTRUCTION
3-751-142-41	(HMK-V102:AEP)...MANUAL, INSTRUCTION
3-751-142-51	(HMK-V102:UK)....MANUAL, INSTRUCTION
4-921-934-01	SHEET, PROTECTION
*4-935-318-01	(HMK-V102)...CUSHION (UPPER)
*4-935-319-01	(HMK-V102)...CUSHION (LOWER)
*4-935-376-01	(HMK-V102:AEP)...INDIVIDUAL CARTON
*4-935-377-01	(HMK-V102:UK)....INDIVIDUAL CARTON

**Note:** The components identified by mark Δ or dotted line with mark Δ are critical for safety. Replace only with part number specified.